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Using Social Media The Inside Out

A qualitative study of
four different local models for
organizing social media in organizations

Thesis for the Degree of Philosophiae Doctor

Trondheim, June 2016

Norwegian University of Science and Technology
Faculty of Social Sciences and Technology Management
Department of Sociology and Political Science



Norwegian University of
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NTNU

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Abbreviations

ANT	Actor Network Theory
BG	Beta Group
CA	County Authority
DPOR	Data Protection Official for Research
GT	Grounded Theory
ICT	Information and Communications Technology
LMS	Learning Management System
MDO	Municipal Director for Organization
NPS	Norwegian Public Sector
NSD	Norwegian Social Science Data Services
NTNU	Norwegian University of Science and Technology
SNS	Social Network Site

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1 Introduction

Since 2008, public take-up of social media in Norway has shown a steep upwards curve. Social media has been diffused and instituted across Norwegian society, leading to a high adoption rate. In 2014, an estimated 3 million Norwegians were registered on the Social Network Site (SNS) Facebook, 1.1 million have a professional CV profile on LinkedIn, about 1 million were on the mobile photo-sharing service Instagram, 1.2 million were linked to Google+, about 900,000 had a user profile on the microblogging service Twitter, and 1.1 million were using the video-messaging application Snapchat (Metronet, 2015). Simultaneously, social media has been adopted by a variety of organizations, including those belonging to the Norwegian Public Sector (NPS). In 2015, 90 percent of Norwegian government agencies were reported to be registered on social media platforms (SSB, 2015). These numbers are remarkable, considering that the total population of Norway is 5 million.

At the same time, we can observe a diffusion of uses, practices, activities, and exchange of ideas embedded in social media within organizations belonging to the NPS. This is demonstrated in tendencies seen in organizational life. First, public administrations with a degree of autonomy and corporate status communicate *externally* with citizens on Facebook and Twitter. Second, public administrations have implemented social intranets, modeling them to resemble professional SNSs like Yammer. Third, public employees “import” their *private* social media habits to work, as they connect with colleagues, create work Facebook groups, share documents in the file hosting service Dropbox, and co-write documents in the web office suite Google Docs. Fourth, the term “social media” is used in *official documents*, appearing in strategy plans and steering documents. Official guidelines for use of social media are commonplace. Fifth, municipalities, county council administrations, state agencies, and state-owned companies allocate human resources to social media, as employees may have social media as part of their *job descriptions*. Sixth, public employees *acquire formal competence*, as they attend post-secondary education courses at universities and business schools, giving them formal qualifications. Seventh, social media is part of a national *e-learning project*, as public employees train to become change agents, promoting how social media can be used for organizational change and development. Eighth, the concept of “*sharing*” is recurrently used, representing a solution able to break down internal organizational boundaries and enhance knowledge sharing and competence building. Ninth, there are many organized *venues* where public servants congregate and listen to a pool of keynote speakers, who explain what social media “is” and what it is “not”. And lastly, there is the *cultural production* of organizational social media literacies, consisting of practitioner books that explain how to use social media in organizations.

Consequently, social media have gained a foothold in organizations, but it is unclear what the potential effects of its presence are in the long run. Organizations respond and adapt to social media in various ways, as it can challenge how they link internal goals, priorities, and activities to a changing external environment, for example. The above tendencies are seldom coordinated by a central authority, but find their way through the orchestration of local bottom-up and top-down *initiatives* carried out by a variety of local actors. Local social media initiatives are in addition characterized by explorative questions of *sensemaking*, as employees try to derive meaning from the experience of using the technology. Social media is approached as *ambiguous*, requiring it to be *explained* and *interpreted* into local realities, implying that we still have an unclear idea of what it “is”.

These tendencies in organizational life serve as the backdrop for this study.

1.1 Research objective: Four stories about social media in organizations

The research objective is to provide and perform an explorative and qualitative study and address the potential impact that social media might have on organizational life. This is realized by establishing a micro perspective showing a gradual adoption and implementation of social media from the point of view of an actor who interacts from *inside* an organization. This is empirically illustrated by examining the outcomes and processes of a set of initiatives performed by people who work in the organizations chosen to make up this study. These initiatives demonstrate how humans translate, organize, construct, and enact local organizations around social media, which are based on their understandings, actions, and interpretations of social media and connect to the organizational context in which they interact. These initiatives are analyzed by combining bottom-up and top-down perspectives and by using analytical concepts from organization studies. These perspectives are intended to trace and illustrate the consequences of social media initiatives in organizations belonging to the NPS, covering the period from 2008 to 2014. For analytical clarification, in this thesis *social media* is preliminarily defined as a set of low threshold web interactive and participative based technologies used for social interactions and for creating, exchanging, and sharing information and ideas in online network communities. An *organization* is tentatively defined as a human institutional arrangement consisting of multiple, distributed, and decentralized institutions possessing different goals, activities, and autonomies which is connected to an external environment.

Specifically, the research objective is to capture the particular conditions, opportunities, and limitations offered and generated by social media, as it is assumed that social media allows users in organizations to organize and coordinate in new ways that are different than what was previously possible. This concerns the structural and technical properties of social media, as it is a developing cloud-based Internet technology that could challenge and rewrite the ways in which ICT tools are traditionally administrated and organized within organizations. It goes without saying that ICTs in organizations are usually governed by an institutional control regime which can define and set the premises for technology use as well as organizational activities and performances. The institutional control regime often has a top-down governing logic which sets restrictions on what its users are allowed and not allowed to do. Moreover, it plays a crucial role in the processes of adoption and implementation of new technologies in organizations and regulates the work practices of employees. In this regard, a common experience is the repeated pattern that adoption and implementation of ICTs can generate unintended consequences. Technology designers and implementers have often observed that end-users can decide to use or enact ICTs in unexpected ways, different than those originally planned or intended, a factor making the process of adoption and implementation of ICTs difficult to predict or control. Furthermore, technology users can be capable of constructing new *emergent social structures* which are enacted and based on the use and interpretation of technologies and can become socially objectified and institutionalized by recursive human action, potentially producing changes or new social organizations.

My study assumes that the arrival of social media could have created increased and simplified conditions for this latter phenomenon. And there are good reasons to explore this condition in greater detail because the plethora of social media services now allows users to start engaging and communicating with peers easily and at a very low cost. Humans can build, institutionalize, and organize social networks by use of social media, a condition that gives us the possibility to take initiatives and create new organizations. Moreover, this creates the potential to use technologies in new and unexpected ways. These structural and technical properties mean that humans can now, by forms of individual enactments or mass-collaboration, use social media's participatory digital culture to produce emergent social structures.

Over the last few years, this appears to have become a tendency in the social media landscape. The links between human initiatives and recurring engagement with social media platforms have created and constituted a range of mediated social media phenomena in *society at large*. These include Internet memes, cyber currencies, hactivism, gaming, dating, and types of identity management, for example. They are the end-result of human creativity, innovation, and engineering and appear to be guided by their own cultural logics. These social media phenomena are even harder to predict or control and are seldom under any “central command” issuing directives – they are essentially *user-driven* and shaped by the contributions from users. Some have the potential to emerge into powerful arrangements and can contradict the position of established institutions, a factor that is valid when trespassing upon and challenging the established domains of particular industries or economies. During the writing of this thesis, the advent of the mobile apps company Uber and the lodging app Airbnb have challenged the taxi and hotel industries or private rental markets in countries worldwide, manifesting the rise of the “sharing economy”. In contrast, what happens and what types of understanding are socially constructed and enacted when local actors in organizations – in either first-line or top-management positions – decide to import, translate, introduce, and legitimize social media and create social media practices through initiatives they organize?

The thesis addresses this matter. The potential of social media to create emergent temporary organizations is empirically explored by examining four different case stories. These case stories examine how a set of defined actors in organizations take the initiative to start using or decide to introduce the same low threshold Internet technology to the members of the organization. Characteristic of these initiatives is how the actors “import” or implement social media and its embedded ideas onto the turf of an organization and initiate a form of activity or embed social media into an existing work practice. From there, the actors form potential work processes which can result in the social constituting of a successful or failed local organizing or social media practice. Common to all these organizations is that they are linked to social media and it would be much more challenging to realize them if the technology were absent. The reality of the local organizations becomes clearer – or perhaps gets a “social life” – when they potentially contradict organizational measures initiated by an organization or its institutional logics. For analytical reasons, I refer to the local organizations as “models”. I use the term as an analytical instrument to give an empirically founded and holistic framework to illustrate how actors use, interpret, and translate social media into their local organizational contexts by initiatives they orchestrate. Moreover, the model concept is used to describe the potential outcome and processes emerging from the social constituting of the actors’ use and interpretation and recurring engagement with social media in organizational contexts. Finally, the models are used to create a solid user perspective on the use of social media in organizations.

Therefore, the research objective is to contextualize how a *single* Internet technology – and its embedded ideas – is used and interpreted by *four* defined actors, who interact in *two* different organizational contexts: in a *K-12 education system* and in a *public administration*. The four actors are affiliated to *three* different organizations, which are given pseudonyms. Each case story explores how each local model is connected to the uses and interpretations carried out by the actors and connected to the correct organization and organizational context they belong to. Each model is also analyzed in light of relevant organizational tendencies, institutional logics and practices, and initiatives linked to social media or ICT. This is done to illustrate the dynamics and depth of the models.

The four case stories have diverse scopes and backdrops, which are outlined in the next sections. The actors, models, and organizations are displayed in Table 1.1.

Table 1.1 Overview of actors, organizations, and local models.

No.	Actor	Local Model	Pseudonym	Organization	Organizational Context	Perspective	Year
1.	Students	Shadow Student Learning Ecology	The Alfa Organization	High school	K-12 Education System	Bottom-up	2012
2.	Teacher	Authentic Learning Situations					2011-12
3.	Beta Group	Relation Platforms	The Echo Organization	City Municipality	Public Administration	Top-down	2008-12
4.	Employees	2.0 Social Intranet Portal	The Lima Organization	County Authority			2013-14

The student case story: The Shadow Student Learning Ecology

The first case story describes the study's first local model, the *shadow student learning ecology*. This is told through what I call the *student case story*. The student case story examines how social media is used, interpreted, and imported into an *educational context* by actions and initiatives carried out by learners. The learners are the study's "Actor number 1". The case story is exemplified by analyzing social media uses and practices among a group of *high school students*, attending either their first and last year at a high school, which I have named the "Alfa Organization". The student case story uses a bottom-up perspective to portray how the students take the initiative and use social media to organize formal and informal learning activities, which is facilitated by but contradicts a national educational measure aimed at boosting their digital competence.

Since the 2000s, Norwegian students and teachers attending high schools have been equipped with laptops with direct access to the Internet. The laptops are intended to follow the students throughout their studies. But teachers experience that such measures do not meet with the expected outcomes. Teachers see that students socialize and use the leisure activities offered by the social media universe, often taking place *in* the classroom. These student practices cause disputes over the intention of having technology condensed learning environments. Teachers argue that the students' social media activities are distractions, claiming that they result in obstructing the formal learning the teachers attempt to initiate. This means that students' uses of social media are evaluated as contradictory with educational views on technology and learning. In order to regain control, many high schools with laptop initiatives attempt to limit students' social media use by installing filters on social media.

The students in the student case story attended a high school with a laptop initiative, which had implemented a technical filter preventing student use of Facebook. In spite of this, the case story reports how the students take the initiative to create and administer Facebook groups, which they use to fulfill formal learning activities. On them, the students post practical information on homework and share cram sheets, or use them as discussion forums when working on school projects. The students use Skype as a means to con their homework, and they co-write school assignments in Google Docs. The students also use YouTube tutorials for

informal learning activities, to maintain and develop their hobbies, like learning to play a musical instrument, to play computer games and to improve their photographic skills. The outcomes of the ways in which the students use social media to organize formal and informal learning activities emerge holistically into a local form of organizing, resembling an autonomous learning ecology that is an off-limits site for teachers – which is organized in “the shadows” of a learning institution.

The teacher case story: Authentic Learning Situations

The second case story describes how social media is used, imported, and interpreted into an *educational context*. The case story narrates an educator’s learning design for working professionally with social media in foreign language teaching, which a digital literate female teacher called *authentic learning situations*. This is the study’s second local model. To show its dynamics, this is described through what I call the *teacher case story*. This is a personalized account about a female language teacher, working part-time at the same high school as the students, the “Alfa Organization”. The female language teacher is the study’s “Actor number 2”. I use a bottom-up perspective to analyze the work practice of a proficient social media user who is an early adopter in her field.

During the school year 2011/12, the teacher taught two classes twice a week, a vocational class in English and a Spanish class in academic studies. The teacher aimed to create curriculum-based classes organized around the use of social media, implying an attempt to decouple from a print technology that has defined the identity of the teaching profession for decades, the textbook. This involved motivating her students to learn a foreign language by using social relations and information accessed via the World Wide Web as a source of knowledge and by regularly working with social media software. This initiative contradicts the teaching and learning methods commonly practiced by teachers, but aligns with an educational goal of enhancing digital competence set by the educational authorities. The case story focuses on *structure* and *process*. I map the strategies behind the teacher’s learning design and I try to capture the *implementation* and *enacting* of the model and to establish recursive patterns from her actions, involving focus on *results*, and *experiences*, and the *adjustments* the teacher had to perform when implementing her learning design. To illustrate it, I tracked the progress of her classes monthly from August 2011 to March 2012, taking a longitudinal perspective on social media use.

The beta group case story: Relation Platforms

The third case story moves to a new organizational context and considers how social media is used and interpreted in *public administrations*. The case story is called the *beta group case story*. The case story examines how a loose cluster of municipal employees took the initiative to form a social media competence group, a *beta*, which is called the Beta Group (BG, a pseudonym). The municipal employees work in a city municipality, which is called the “Echo Organization”. The BG members created their own definition of social media which forms the study’s third local model, *relation platforms*. The BG members are the study’s “Actor number 3”. This case story uses a bottom-up perspective to analyze the work practices of a group of proficient social media users who are also early adopters in their field.

The case story establishes a process approach and tracks the history and activities carried out by the BG from the fall of 2008 to the spring of 2012, illustrating how employees in organizations are starting to work professionally with social media and build specialized knowledge around it. During this period, the BG members began engaging with a variety of

social media platforms and started to examine a range of social media software, which they systematically reviewed and tested internally in the city municipality. These activities contributed to the creation of their own definition of social media which they called “relation platforms based on user-generated content”. The BG members authored the municipal guidelines for use of social media fitted to an organizational context. The definition and guidelines are the result of self-initiated research, experimentation, and reflection on their own practice and use of social media. A knowledge production process occurred that has been subject to changes as the group has interacted with ongoing priorities, goals, and activities in the municipal organization where they work. The definition and guidelines consist of adopted symbols and expressions from the contemporary web culture and are part of a genre repertoire on how employees can use and embed social media into their work practices, forming an organizational literacy in social media. The case story examines events in the BG’s history which have played a role in the knowledge production process leading to their self-created definition of social media. This case story has a longitudinal perspective on social media use.

The social intranet portal case story: 2.0 Social Intranet Portal

The fourth case story analyzes how social media is translated and interpreted in a public organization. This case story is called the *social intranet case story*. The case story investigates the decision of top management in a public administration or County Authority (CA), which I have named the Lima Organization, to implement a new intranet. This consisted of upgrading its older intranet and turning it into a social intranet by embedding a variety of technical features enabling information sharing, modeling it to be similar to an internal professional enterprise SNS like Yammer. The social intranet was acquired through public procurement and implemented and organized as part of an internal project. The goal was to improve internal communications, simplify employees’ work surface, escape e-mail burden, and contribute to bridging gaps across internal organizational boundaries, as part of a goal to bring organizational change and development within the CA. Another goal, however, was the promotion of an organizational discourse stressing the importance of *sharing* content on the new social intranet and legitimizing a *sharing culture*. This implied that employees needed to be encouraged to change their communication and work practices, by transferring their private work interaction from e-mail to increasingly sharing work and communicating on the social intranet. Although technical implementation went well, the top management later perceived that sharing was not occurring at an expected level as employees were reluctant to engage and share.

To analyze one side of this situation, the case story tracks how the initiative is interpreted and what meaning sharing and sharing culture acquire, by using a top-down perspective. The case story attempts to show how embedded ideas linked to social media are socially constituted and translated into an organizational context. This creates the dissertation’s fourth local model, the *2.0 Social Intranet Portal*. This is described by analyzing the user experiences of a group of employees holding different positions in the Lima Organization. The employees are the study’s “Actor number 4”. The case story pays attention to their different levels of involvement in the implementation of the social intranet and how they negotiate boundaries and define performance of their roles. I pay attention to how the employees interpret the social intranet and the meaning of sharing and how they relate that to their use of the social intranet.

1.2 Research questions

The dissertation has a main research question which connects to understanding the ways social media is adopted and implemented in organizations.

The main research question is: *How is social media interpreted, used, and classified, and what kinds of new practices can we identify in the public sector?*

This main research question is addressed by reformulation into four questions:

1. How do actors evaluate, classify, and define social media in organizational contexts in which they interact?
2. What types of user patterns can we find?
3. To what extent is use of social media congruent with organizational practice?
4. In what ways do social media challenge organizations?

1.3 Structure of the thesis

The dissertation consists of eight chapters. This introduction is **Chapter 1**. Here, I explain the background to the study, the research objective, and the four case stories, and establish the research questions.

Chapter 2 outlines the *research approach*. I address the methods and research strategies I have used to complete this study. **Chapter 3** establishes the *research perspective*. I outline the analytical perspective, key concepts, and the relevant research horizon I have used to analyze the four case stories.

Chapters 4, 5, 6 and 7 make up the *data analysis* part. The data analysis chapters follow the same structure and rely on contextualization. Each chapter introduces a relevant and separate key theoretical concept, which is used to analyze the individual *case stories* and frame their respective models. Each chapter contextualizes the organization and initiative, before pursuing and analyzing the social media user experiences of each actor. **Chapters 4 and 5** empirically analyze the uses and practices of social media in an educational context. **Chapter 4** accounts for the *student case story* and the local model, the *Shadow Student Learning Ecology*. **Chapter 5** expands on the educational context, but uses a teacher perspective to describe the second local model, *Authentic Learning Situation*. **Chapters 6 and 7** move on to the second organizational context and describe the uses, practices and ideas of social media in public administrations. **Chapter 6** analyzes the third local model, *Relation Platforms*, and examines the *beta group case story*. **Chapter 7** builds on the previous context and analyzes the fourth local model, *2.0 Social Intranet Portal* and focuses on the *social intranet case story*.

Chapter 8 is the conclusion. This chapter draws together the overall research results and establishes the dissertation's contributions to research.

2 Research approach

This chapter accounts for the dissertation's research approach. I address the methods and research strategies I have used. I explain this over the chapter's six parts. The first part describes the incentive for initiating my study. The second part accounts for the study's methodological orientation. Here, I reflect on my choice of the methods used and the implications of using them. The third part outlines the research process, presenting the ways I operationalized my initial research design, the study's data sample, the specific methods I used and how I approached the various research locations I visited. In the fourth part, I account for the strategies I used to code and categorize my data, which helped me to develop the four local models. Research challenges, validity, and generalizability are described in the fifth part. The sixth and final part summarizes the chapter.

2.1 Part I: Background for initiating the dissertation

One of NTNU's strategic research priority areas on ICT,¹ *ICT in the Norwegian Public Sector*,² initiated the incentive for realizing this study. As part of it, NTNU issued a national public call in February 2011, inviting potential PhD candidates to design a research project, as a response to research organizational change and new challenges believed to be taking place in public organizations (NTNU, 2011). In brief, the call claimed that government-initiated ICT projects tended to end unsuccessfully and large resources were spent on project mismanagement (Heeks, 2005). Social media and its embedded sharing culture were portrayed as a feasible solution that could contend with such challenges. The call suggested that the successful applicant could expand on a set of research literatures, like linking social media to the e-governance/e-government field (Rossel & Finger, 2007) and organizational learning (Argyris & Schön, 1978). But the call left it relatively open to explore and design a feasible project, which should approach the links between some overall themes, such as "social media", "sharing culture", and "The Norwegian Public Sector" (NPS). I prepared a proposal to examine the uses and practices of social media in the *Norwegian education system* and *the municipal sector* (Haugsbakken, 2011b). In short, I proposed an explorative and inductive approach and intended researching what such uses and practices might be – potentially, their implications for organizational life. I opted for studying how defined actors used the technology, defined across organizational contexts, by applying qualitative research methods and a case study design. This design has been used throughout my research for this dissertation. The most important aspects of my original research design are outlined later in the chapter, in part III.

2.2 Part II: Methodological orientation of the dissertation

The dissertation's methodological orientation is inspired by research methods and strategies, which have been practiced in organization studies. Many organization researchers have investigated organizational life from an "insider perspective" by use of qualitative methods. This school goes back as far as the 1960s (Bryman, 2013) and continues to grow as new generations of students of organization studies carry out their research this way (Aasen, 2009; Bye, 2010; Haugseth, 2012). These researchers are inspired by social science disciplines like social anthropology and sociology which are prone to favoring long-term, in-depth examination of context or experiential immersion in a subject matter. Strati (2000) argues that researchers who choose such an approach tend to collect interpretations given by actors of aspects and

¹ For more information, see: <http://www.ntnu.no/ikt>

² For more information, see: <http://www.ntnu.no/ikt/english/egov>

events of organizational life and point out the nuances coming from them. They tend to favor aspects of Geertz's understanding of ethnography, which is a method consisting of "establishing rapport, selecting informants, transcribing texts, taking genealogies, mapping fields, keeping a diary" (1973:6), research techniques used to convey a particular people or culture. Geertz emphasizes that doing ethnography is about producing knowledge by reflection and performing "thick description" (1973), by interpreting the accounts a researcher collects. This research strategy permits organizations researchers to move in and out of organizations, allowing engagement with individuals in the field. And, for the record, I follow this established methodological orientation with this dissertation.

Consequently, choosing to do a qualitative study requires a brief statement of my position and my assumptions on reality. I believe this is important, as qualitative researchers have a long tradition of creating various intellectual scholarly directions, which have extensively debated various ontologies and epistemologies. Moreover, these have shaped the intellectual thinking of certain social science disciplines – social anthropology and sociology are no exceptions. But I hasten to stress that I do not enter into them here. An important lesson from them that is relevant to my work, on the other hand, is that the methods a researcher uses to collect his or her data reflect the epistemological and ontological presumptions of the researcher. This can influence many aspects of my research, like the choice of theory, how I interpreted my data, and even my conclusions.

My thesis is inspired by the phenomenological paradigm of Husserl (1931) and its extension into the field of social phenomenology (Schütz, 1963, 1964, 1967). Husserl's work aimed at understanding the formal structures of intentional consciousness, his objective being to achieve a larger transcendental phenomenology. Schütz had another scope, as he directed his attention to establish the formal structures of what he called "life-world" (Schütz & Luckmann, 1974), which is referred to as the meaningful lived world of everyday life. And by this, he argued for a more mundane phenomenology of the social world. Berger and Luckmann (1967) appeared to be making a similar argument when they argued for the *social constructionist view*, which entailed that reality is a context-dependent phenomenon emerging from the complex social interaction seen in human behavior. Central to this argument, which I interpret as having ties to social phenomenology, is that humans over time create concepts of each other's actions through social interaction. These are later part of socialization processes, whereby humans play them out in reciprocal roles in relation to each other. When these are made available to others, reciprocal interactions are said to be institutionalized and embedded into society. On the other hand, my study assumes that the reality investigated also to harmonize with the views outlined by Mead (1967). Mead argued for a *transformative process ontology*. He claimed that human's social life is in constant flux, as a form of perpetual negotiation and construction of reality. The development of distinct human aspects, like the mind, consciousness, self-consciousness, and society, are the results of an ongoing process, where individuals relate to cooperative-interdependence with other people. This position argues for a certain notion of causality to be valid, as reality is developed because of social interaction. It also assumes that humans do not create any social phenomena external to their own relationships.

I attempt to follow along these lines. To put it in my own words, my thesis is foremost an interpretive, reflexive, and explorative work that focuses on social interaction and context. My work aims at understanding and describing how humans continuously interpret and organize themselves in relation to the material and immaterial social sides of an ambiguous changing artifact that is assumed to influence an institutional arrangement and its embedded contexts and realities. Central to my assumption is interpreting how this transpires as part of the everyday life of the individual who is exposed to it, uses it, creates, practices, and enacts upon it through

social interactions, and how he or she attempts to ascribe meaning from that through his or her lived experiences. I am also motivated by exploring humans' ability and ingenuity to create meaningful meanings from past and lived experiences to produce potential new ones, by their interpretive accounts and actions and ability to negotiate over meaning by in-depth immersion and contextual exploring. This latter point is essential to the thesis. I am curious to grasp humans' generic capabilities to form and produce potential emergent meanings and social structures from the material and immaterial social sides of an ambiguous changing artifact, which are attempted, socially instituted, organized, and managed, while they interact continuously in various fields of mutually constituting social orders that might shape or bound their life worlds. Moreover, I am curious to analyze how these become socially constituted and can potentially expand organizational space and organizations. These assumptions, I believe, can allow us to grasp how social media is adopted and implemented into organizations, by humans' interpretation, uses, and practices. Crucially, I hope that such might contribute to produce new research knowledge, beyond simply confirming or reporting new empirical findings.

2.2.1 Reflections on the choice of methods

My choice of methodological orientation has implications, notably, for my research practice. These need to be addressed and I bring some up for reflection. First, the intent for using qualitative methods connects to an aim of *expanding on prior experiences*. In 2004, I graduated from the University of Bergen with training in social anthropological methods like fieldwork, qualitative interviewing, and participant observation. I applied this in 2002 when I carried out fieldwork in Barcelona, Spain, over eight months. This aimed at investigating the local effect of an organization's changing face; that football clubs transform into international corporations and local supporters' experiences of that particular social permutation (Haugsbakken, 2003, 2008). I have also carried out shorter periods of fieldwork on the Italian island of Lampedusa and Malta, completed in 2005 and 2007. These visits connect to my interest in immigration research. From 2007 to 2011 I held a research position in SINTEF and was affiliated to a research unit specializing in school and education matters. I worked with education and work sociologists.³ I researched the K-12 system for the Norwegian Ministry of Education and completed projects by use of qualitative research methodology (Haugsbakken, 2010). In sum, with such a background, I evaluated it as logical to continue the same path with this study.

Second, I used a qualitative research strategy to *pursue a knowledge process* and worked with *theory and data interchangeably* as I traversed different organizational contexts and engaged with informants with various affiliations. This is perhaps a different way to engage with theory and data, as other disciplines can make clear distinctions between them. I saw it otherwise. I needed some sort of tentative system of ideas, generic perception, contemplative and rational form of abstracts, a form of generalized thinking, to understand the field with which I was engaged. Besides, many of my informants were educated in using some sort of generalized thinking – they were highly academic and had university degrees – and they applied this skill to understanding the technology and the organization they worked in. Excluding theoretical speculation from an ongoing data collection would have made it increasingly difficult to relate to the life worlds of my informants. It would have turned me into a socially illiterate student of organization studies too. Some organization researchers also imply that organizations are social constructions and that we need to apply sociological theory to understand them. In contrast, one requires some sort of analytical construct to engage with colleagues, to understand the field and

³ SINTEF is the largest independent research institute in Scandinavia, carrying out contracted and applied research. It has about 2200 employees, of whom 1800 are researchers. For more detailed background, see: <http://www.sintef.no/home/>

the meaning of the data, but most crucial, comparing my theoretical interpretations with those of others can advance knowledge production. I used a qualitative research strategy to produce knowledge by reflection and interpretation. I also applied various theoretical concepts, as throughout the research process I interpreted continuously, speculating on what the practices I observed could mean. This resulted in adopting certain theoretical concepts that became imperative to my work, while rejecting others. I had a long “theoretical debate” with myself, for example, on whether to use an organization studies perspective, Actor-Network-Theory, social network theory or a media and communication perspective.

Third, a qualitative research strategy has influenced the description of my research design and framing of research questions. This has involved *revisions during the course of my study*. My research questions have been modified, foremost making them more concrete, fewer, and more comprehensible. The initial design was too broad, resulting in me reframing it. I came to see my work as akin to a *case study*, which is split into four case stories. This understanding is somehow incongruent with established definitions. Yin (2013), for example, has argued that theory needs to be developed as part of a design phase, before it can be called a case study. Theory development is a criterion before data collection can start. Again, I somewhat defy conventional distinctions between theory and data. My study did not develop theory prior to data collection. Therefore, I regard my case studies as more aligned to Ragin’s (1994) definition, which argues that the research process is a continuous dialogue between that which emerges from empirical investigation and previous analytical frames.

Fourth, conducting a qualitative study from the inside of an organization involves being presented with many impressions. This has required me to have personal *strategies and techniques to organize, manage, and make sense of my data*, so I could perform my data analysis. Researchers use different strategies to realize this, like personal interpretation, computer software, or well-developed techniques and procedures to code and categorize events and phenomena. I have partially used and been inspired by data analysis strategies used in Grounded Theory (GT). GT is understood as an inductive and explorative sociological data analysis technique, focusing on patterns in human social interaction. GT focuses on the continuous coding and categorization of concepts by constant comparison of data (Strauss & Corbin, 1990; 1998). I have coded my data in order to understand potential emergent uses and practices transpiring from the informants’ interpretation of social media. Coding has played a role in illustrating the dynamics, depths, and nuances seen in social media uses and practices. Moreover, coding has been a strategy to construct the dissertation’s four local models.

Fifth, researching organizations by qualitative methods involves *complex negotiations on entering an alien turf*. This point is stressed by several organization researchers. Strati (2000) argues that research design can undergo changes, as researchers have to negotiate access to organizations. This is difficult and can create uncertainties, as Strati contends further, so that such phases are often omitted from stories on how researchers completed their work, creating the impression that researching an organization is a rational enterprise. Buchanan et al. (2013) argue that the reality is seldom like that, as researchers have to overcome barriers; researchers meet gatekeepers who decide their fate. Getting access depends on the personal capacity of the researcher. This manifests in different ways, for example, from the first request to developing personal ties with informants, how one gives feedback, how one uses interviews as a door-opener, and re-entering the organization after a longer period of absence. Garsten and Nyqvist (2013) make a similar point, contending that such challenges exist because organizations are prone to maintaining exclusive membership, protecting their ideological or financial interests, and exercising secrecy about their key resources. Organizations restructure and have educated informants with advanced degrees, meaning that research settings are contested. This has

influenced my work too. I have often been involved in negotiating access, something which starts from the very first approach. Requests are evaluated, not only by the informants I have interviewed, but also by high-ranking authorities, placed somewhere “above”. This influenced how my study was carried out.

2.3 Part III: Research process

This section outlines the research process. My reflections illustrate that changes can occur in qualitative research. I attempt to point out some of them by briefly summarizing my initial research design and addressing how I operationalized it. I also outline the data sample, the methods I used, and how I approached the various organizations I visited.

2.3.1 Initial design in brief

Research projects start with defined assumptions and intentions. I aimed at identifying factors that contribute to realizing a culture for collaboration, cooperation, sharing of knowledge, expertise, and experience in the NPS. This was to be achieved by studying social media’s *sharing culture*, claiming it to be shaped around an innovative technological platform (Haugsbakken, 2011a). I planned to study user practices, understood as work practices or work processes. The study sought to understand how people with various organizational affiliations, used social media, what experiences they acquired, their preferences, and the ways that experiences were shared, in contexts where humans socially interact. I took it upon myself to grasp how social media use was interpreted and how actors related to their user habits. Moreover, comprehending new emerging interaction patterns was also part of my research agenda. Finally, my design aimed at researching how social media was used as part of ordinary organizational contexts and organizational life.

Second, I linked my research plan to established theoretical perspectives. These included; (1) Actor-Network-Theory (Callon, 1986; Latour, 1987, 2005; Law & Hassard, 1999) and sociological perspectives on social network (Granovetter, 1973; Wellman, 1999); (2) organization research on idea work and tacit knowledge (Carlsen, Klev, & Krogh, 2004); (3) media sociology and media and communication perspectives (Castells, 2001, 2004); (4) the e-government (Sæbø, Rose, & Molka-Danielsen, 2009); and (5) new learning theories in educational research (Siemens, 2005) and organizational learning (Argyris & Schön, 1996). I used a white paper from SINTEF (2011) to define the latest research horizon on use of social media in organizations and to identify where the knowledge gaps existed that needed to be filled.

Third, I stated several secondary objectives. The study was to be cross-disciplinary orientated; I intended combining academic and applied research and I wanted to contribute to both fields; my project had an inductive approach; and it was anchored within a process-oriented perspective. But understanding the interaction between two terms “social media” and “sharing culture” stood at the top of my priorities. I was interested in knowing what they “are” and “meant”. I argued for “deconstructing” and “reconstructing” them, to see them in relation to contexts, to capture similarities and differences, moreover, their embedded meanings.

Fourth, I asked these research questions; how do individuals evaluate, classify, and understand social media? What “is” and what “is not” social media? What is the meaning of a sharing culture and how is it understood? How does social media challenge the public sector? How is social media legitimized? How is social media understood, in relation to implemented policies and top-management priorities?

Fifth, to limit my scope, I suggested researching the research questions across two fields, which I defined to be a part of the NPS. These were “*the education system*” and “*the municipal sector*”. In each I would study a set of actors, who I assumed interacted in what I defined as “contexts” or “arenas”. I defined four “contexts”/“arenas”. The first was called “*use and learning of social media in the education system*”. This would explore how students, teachers, and teacher educators used social media. The second was called, “*municipalities’ use and legitimizing of SNSs in the production of services*”. The aim was to focus on how social media was used by municipal employees, potentially what role it played in their work, and how citizens used it. The third was labeled, “*individual experiences on use of SNSs in the production of services*”. The intent was to explore how employees used social media to communicate across organizational boundaries, to share experiences, and what they learn from that. The fourth was, “*platforms of technology as a mean for sharing of experience*”. The intention was to study an enterprise SNS.

Sixth, I aimed at using different qualitative methods. I would engage with the field and recruit informants as I entered each of the “contexts”/“arenas”. Passive participative observation, semi-structured interviewing, a case study approach, and workshops, were my preferred methods. The latter method was to be organized as a seminar, where I would invite informants to have conversations about social media. I would use the workshop approach as an opportunity to collect data. I suggested creating a “typology of social media” too, implying the developing of a systematic classification scheme that showed common characteristics for use of social media in organizations. This was to be used to develop new insights, methodologies, and concepts. To realize it, I stated I would use a “stepping-stone-stage framework”, which would be used during different parts of the data collection process. I saw it as useful, as it could be used as a research strategy to give clearer “meanings” to my data. It could also be used to create a sharper research focus. I would use it to map two central concepts, “social media” and “sharing culture”. To fulfill this objective, I argued for applying a procedure which consisted of various stages:

2.3.2 Reality of the initial research design after operationalization

The data collection process caused me to change some of my original assumptions and intentions. This occurred as a result of operationalizing my initial proposal and my engagement with the field. The main challenge was to find tangible ways to conduct my research, as I later came to view my work as an open-ended research proposal. The main challenge was to downsize and make analytical links between “*social media*”, “*sharing culture*” and “*the Norwegian public sector*”. The main changes are set out below.

First, I needed to have a clear measurement of what technology I researched. I therefore used Kaplan and Haenlein’s (2010) definition of social media as a start. Their definition links Web 2.0 and User-Generated Content together, but it emphasizes the material properties of social media and somehow excludes the social aspects. Kaplan and Haenlein identify six types of social media: blogs, SNSs, wikis, content communities, gaming sites and virtual social worlds. In brief, the difference between them is characterized by the extent to which a social medium is individually orientated or can be used for collaborative purposes. Moreover, Kaplan and Haenlein argue that the media richness of various social media is another way to tell them apart. During the research process, I focused on blogs, SNSs, wikis, and content communities, mostly because my informants used them. My view on social media changed. I came to see it as a low threshold web interactive and participative-based technology used for social interactions, which can be used for creating, exchanging, and sharing information and ideas in online network communities. I preferred this definition because I saw limitations in that of Kaplan and Haenlein.

Second, operationalizing my research design and visits to the field involved reframing of my understanding of “the Norwegian Public Sector”. I defined “the NPS” as an *organization* consisting of multiple, distributed and decentralized institutions possessing different goals, activities, and autonomies, and is connected to an external environment. This definition was used for analytical reasons. I applied it because I saw it similar to the definition suggested by Clegg, Kornberger, and Pitsis, who define organizations as “systematically arranged frameworks relating people, things, knowledge, and technologies, in a design intended to achieve specific goals” (2011:8). Consequently, my original idea of studying the “*Norwegian education system*” and “*the municipal sector*” were also modified, which I came to see as the “*K-12 education system*” and “*public administration*”. I used these concepts as a way to have a clearer idea of the organizations representing the NPS. This meant that my initial ideas of “context/arenas” were also modified, later producing separate case studies. I also replaced the term “case study” with “case stories” by which I refer to detailed accounts that explore a particular subject matter.

Third, my visits to the field meant rearranging my data sample and the way I presented it. I did this to make my study easier to comprehend. I also introduced and use the term “actor” throughout the dissertation. I use it to describe the actions of an individual or a group of humans. Of the original four “contexts” suggested as case studies, one was dropped, while three remain and are part of my study. The first context, “*use and learning of social media in the education system*”, became an exploration of a digital literate teacher and her two classes at a high school. The high school was defined and presented as an organization, being part of a larger institutional arrangement or organizational context I called the “*K-12 education system*”. The students are presented as “actor 1” and the teacher as “actor 2”. The second context, “*municipalities’ use and legitimizing of SNS in the production of services*”, resulted in an analysis of a municipal competence group specializing in social media. The fourth context, “*platforms of technology as a means for sharing of experience*”, developed into an inquiry into how a group of county council employees used an upgraded intranet portal. The second and fourth contexts were defined and presented as an organizational context I called the “*Public Administration*”. The members of the social media competence group and county council employees were evaluated to be affiliated to the same type of organization, only being separated by administrative and geographic responsibilities. I called the competence group “actor 3” and the group of county municipal employees “actor 4”. The fourth context, “*individual experiences in use of SNSs in the production of services*”, was dropped from my study.

Fourth, I abandoned the use of the so-called “typology of social media”. I realized that I had become side-tracked and it had lost its analytical purpose. The operationalizing of “sharing culture” turned into a separate case story, which is explored in Chapter 7, although “sharing” surfaces as an important theme in the other case stories.

Fifth, during the data collection period I visited three different organizations, implying engagement with three different research locations. To separate the organizations, I gave them pseudonyms. “The Alfa Organization” is a pseudonym for a high school. “The Echo Organization” is an alias for the city municipality where the competence group is affiliated. “The Lima Organization” is a pseudonym for the county authority where the county municipal employees work. The pseudonyms are also used to describe how I approached them methodologically, to which I will return later in the chapter. The two first organizations were visited to acquire in-depth knowledge of how people use social media, while the third organization was visited to examine specific research questions for one of my case stories. I collected my data over two separate periods. The first lasted from August 2011 to June 2012, the second from May 2013 to February 2014.

Sixth, the persons and organizations comprising the data sample are the result of strategic research work. Most importantly, my criteria for selecting them connects to them all being affiliated to the NPS. I also chose them because they were confronted in various ways with challenges that inevitably arise with the use of social media in organizational life. They were therefore relevant to fulfill the goals I set in my original proposal. In contrast, a researcher does not always have all their research wishes granted, implying that under the research process I have been subject to conditions beyond my control. In this regard, getting access to an organization is part of a long process of negotiation and trust-building. For example, I approached various public agencies and companies and asked if they wanted to be part of my study, and some of my requests were rejected. There is also a “contest” between researchers. This means that there are often more researchers than available and interesting cases, a factor that led to me dropping potential cases from my study. Finding a relevant case is a process in itself, which means that a mixture of strategic work and chance have influenced my choice and the process on which certain cases became the final ones making up this current study.

2.3.3 Data sample

The thesis is based on the individual experiences of 39 informants, 16 females and 23 males, ranging in age from 16 to 60. When grouped according to demographic variables, there are 26 high school students (9 female and 17 male), and a female teacher. Of the male students 11 attended a vocational study program, studying to become carpenters, while the other 15 (9 female and 6 male), attended general or academic studies. The students were aged from 16 to 18. The teacher is in her 50s. The municipal competence group in social media consists of three males and one female, all aged in their late 20s and mid 30s. They are affiliated to the IT and Communication Department in a city municipality. The remaining eight county council employees (5 female and 3 male), aged from 30 to 60, work in various departments in a county authority. The data sample is displayed in Table 2.1.

Table 2.1 Description of actors, types of organization, and data collection process.

No.	Actor	No. of informants	Pseudonym	Organization	Organizational context	Data collecting period	Methods
1.	Students	26	The Alfa Organization	High school	K-12 Education System	Aug 2011– March 2012	Fieldwork Interviews Written artifacts
2.	Teacher	1					
3.	Beta Group	4	The Echo Organization	City Municipality	Public Administration	Nov. 2011– June 2012	Interviews Written artifacts
4.	Employees	8	The Lima Organization	County Authority		May 2013– Feb. 2014	

2.3.4 Methods applied

I used various qualitative research methods. These include searching in research databases, conducting interviews, passive participatory observation, and writing field notes and collecting written documentation and digital content. How I used them is outlined below.

Search in research databases

Throughout the research period, I systematically searched in research databases. I see this as essential. To be able to participate in academic discourses requires knowing the relevant theoretical perspectives and the knowledge gaps in the latest research horizon. To accomplish this, I used the research databases BIBSYS, Scopus and Sociological Abstracts.

Interviews

Interviews were the main research method. I used interviews as a structured conversation to guide the interaction between myself and my informants. Interviews were carried out individually and in groups, meaning face-to-face conversations between myself and my informants. My interviews were *explorative* and *formal*. The first format relates to how my key informants and I discussed and attempted to establish the meaning of social media use and practices. The second format is formal structured conversations. Here, I was interested in getting detailed accounts about the subjects' social media use. These interviews were carried out in formal settings. By this, I mean that the informant and I agreed that the very situation we were a part of was an interview. These interviews were carried out in classrooms, in offices, and on the telephone. Before my interviews started, I always explained *who* I was, *what* I represented, *what* the research was about, and *what* my intentions were. I explained that it was voluntary and that they could withdraw at any time from my research project. The informants received the interview guides in advance by e-mail. All the informants signed a letter of consent. I used a digital recorder and completed 40 semi-structured interviews with 39 informants. Two informants – the teacher and the head of the social media competence group – were interviewed several times, the others only once. I recorded and transcribed 29 single interviews and 11 group interviews. I translated them from Norwegian to English. The informants' backgrounds and the interview periods are displayed in Table 1 in the appendix.

Passive observation, field notes and written documents

I conducted passive participatory observation, wrote field notes and collected written documents. I followed the work of the teacher in the classroom and observed the social competence group's activities. When I was with them, I wrote field notes. The written documentation is that produced by the informants. These include printed documents and digital content, like official reports, e-mails, steering documents, assignments, lectures, PowerPoint presentations, etc. I collected digital items like blogs, etc.

2.3.5 Approaching the organizations in the field

I have established that I visited three organizations during my data collection period. A brief description of each organization is therefore provided. How I approached them, the research methods I used, and the data I collect in each organization, is outlined below.

The Alfa Organization: Teacher and students at a high school

The Alfa Organization is a high school located in a suburb in the outskirts of a city. It has 1300 students and a teaching staff of 200 employees. Students are recruited from the surrounding suburbs and more distant municipalities. The school offers vocational and general/academic study programs. In terms of gender, there is an even distribution among the students, but their choice of study programs is gendered. The students choose their studies according to traditional types of work. In construction studies, a male-dominated profession, many of the classes consist

only of males. In academic studies, there is an even distribution between the sexes. The high school has a technocentric policy; for example, digital competence is a priority area. It is common to see students sitting around in corridors communicating with each other on their cell phones. Another common sight is teachers and students carrying laptops on their way to class, a reflection of the equipment provided to them by the local school authorities. They are all connected to the many mounted wi-fi hubs, which turns the school into an IT organization, with a department dedicated to the control of and operating responsibility for more than 1500 individual user accounts and laptops. The department can enforce limited controls, like setting restrictions on what type of software is allowed on laptops, and temporarily lock down computer networks. Filters on websites can be used when necessary. The school uses a Learning Management Systems (LMS). In every classroom, there are smart boards and loud speakers.

In June 2011, I started my approach to recruit informants who could represent a case study on how social media is used in the education system. I approached a teacher education college in order to find a way into a classroom. From previous experience, I knew the college had a study program for practical training of new student teachers. As part of it, the teacher education college has a large network and collaborates with many schools across a wide geographical area. My contact there told me that, if I explained my research project in a formal note, it could be disseminated throughout their network in an e-mail. But there was no response to it and no teacher volunteered to become part of my study at that time. In August, I approached the teacher education college again and I was introduced to a female Associate Professor in language didactics. She could help me, I was told. She was portrayed as a digitally literate teacher who was fluent in French, Spanish and English. The professor explained to me that she had had a part-time job as a foreign language teacher at a nearby high school for some years. Her classes were intended to be as “digital” as possible, which meant that she aimed to use social media as part of her classroom practice; she was skeptical about textbooks. She invited me to follow her classes. I set up a meeting with the school’s head teacher. I explained the intentions behind my research project and showed him the DPOR’s letter of consent. The head teacher had no objections and I used the meeting to explain that the school management was informed about my research activities. The students were also notified through the same letter of consent.

My data collection at the high school is characterized by the development of what I call “in the field research strategies”. They aided me in performing practical data collection by allowing me to single out the study’s *entity*. Further, this narrowed down the scope of my research in the field. I applied this by following the teacher’s practice and her two classes. The organization of the teacher’s work hours dictated my research practice. For the entire school year, she had a weekly work schedule organized around two classes, an English class in vocational studies and a Spanish class in academic studies. She had three class sessions each week, consisting of six school hours of teaching. The English class, once a week, was on Wednesdays, for two school hours (lasting 45 minutes each), starting at 13.55 and ending at 15.35, with a break in the middle. Her schedule for the Spanish class consisted of starting at 9.50 and ending at 11.35 on Wednesdays. On Thursdays, class began at 8.15 and finished at 10.00 in the morning, with several small breaks. This meant that I would be present at the school one or two days a week, on Wednesdays and Thursdays. The English class had 15 male students, while the Spanish class had 17 students with an even distribution between male and female students.

My data collection consisted of two periods each with a different research focus. The first research period lasted from August to December 2011, the second from January to March 2012. During the first research phase, I focused exclusively on following the *teacher’s* practice. This was semi-experimental, used to familiarize myself with the setting, build trust, make my intentions clear, and learn more about how social media is used in a classroom setting. I only

attended *one* of her classes during this research period, the English class. I visited the high school nine times, which meant dropping in about once or twice each month, before the teacher and the students went on Christmas holidays. The second research phase was more comprehensive. It is characterized by going deeper into understanding the life world of the *students*. I would now be present for two full days each a week for almost three months, attending both the English and Spanish classes. I visited the school 14 times during that period.

I used various different qualitative research methods. The main method was in-depth qualitative interviews using an interview guide. In total, I completed 25 interviews; 13 with the teacher and 12 with the students. The teacher interviews were individual and organized as a series, with me as the interviewer and the teacher as the informant. We started in September 2011. We met on average every second week, often straight after her classes on Wednesdays. The interviews were explorative. In the beginning, we examined the outcome of the lesson. I asked how it went, if it was a good or a bad lesson, if she felt that the students learned anything, if they understood the intention behind her learning activities, etc. We explored how the male students in the English class reacted to her learning design. Before the first half of the school year was over, I had completed six in-depth interviews. These would last from one to almost three hours. During the second period, I conducted seven interviews, in which I explored distinct topics. These included evaluating Web 2.0 software, the work practices of the students, the challenges with operationalizing the national curriculum, etc. The completed interviews with the teacher are listed in Table 2 in the appendix.

For the students, 26 students were interviewed (see 2.3.3 above), recruited from the teacher's classes. The male students in the English class were 17 to 18 years old, while the others in the Spanish class were 15 to 16 years old at the time of my data collection. The students in the vocational class were finishing their last year, while those in academic studies were attending their first year of high school. I conducted 12 interviews with the students, 10 in pairs and two individually. I had explorative and structured conversations with one or two students at a time, using an interview guide. I asked about their experiences using social media, and to what extent they used it for informal and formal learning. I was interested in knowing how they perceived and used blogs, Facebook, Twitter, and YouTube, and if they gamed. All interviews were conducted on the school's premises. The interviews lasted between 20 minutes and one hour. I also conducted approximately 60 hours of classroom observation. I also wrote field notes, as a way of keeping track of my data. I collected written artifacts, two wikis created by the teacher and 22 student blogs. The informants' backgrounds and the interviews I completed with students are displayed in Table 3 in the appendix.

The Echo Organization: The Beta Group in a city municipality

The Echo Organization is a public administration and part of a city municipality. The public administration serves an elected municipal body with a large population consisting of approximately 200,000 inhabitants. The management and maintenance of schools, roads, and health services are important functions. The city municipality has a degree of corporate status and consists of several independent units, departments, and municipal companies. The municipal competence group in social media, which for research purposes I have called the "Beta Group" (BG) (a pseudonym), has members working in two different departments, the IT and Communication departments. These are formally affiliated at a high-ranking level under the Municipal Director for Organization (MDO), which has licensed auxiliary functions inside the city municipality as a whole. It is a "small organization" running a "bigger organization". Its purpose is to develop and assist thousands of municipal employees. The MDO provides "internal services" to other units that produce "external services" and have direct interactions

with the city municipality's citizens. The MDO is made up of several internal departments. They specialize in work environment, procurement, accounting, legal issues, office matters, HR, interpretation services, archives, and finances. The main task is to promote the most efficient operation and provide excellent administrative support to service units. This means that the BG is part of an "internal organization" with about 500 to 1000 employees.

The IT Department has 20 to 25 employees. It has the responsibility for the city municipality's IT infrastructure. Since 1992, operational tasks of data and telephone systems has been outsourced to subcontractors. The employees are not involved in technical operations, but act as a unit having formal and strategic responsibilities. The department has responsibility for 20,000 user accounts, 3600 desktop computers, 4000 laptops, and 750 network printers. The department is responsible for the IT infrastructure used by the city municipality's education sector. It is also in charge of a telephone system and roughly 250 different software programs. The department is responsible for all changes in programs, including installing of software, upgrades, and implementation. The main task of the Communication Department is to oversee the city municipality's communication and information activities. The employees work mainly on a strategic level, to strengthen work on reputation and credibility, and democracy conditions, and with enhancing the city municipality's strategies for internal communication. The department has 10 to 15 employees and updates the city municipality's web site.

The Beta Group was formed in 2008 and is today a permanent cross-disciplinary competence group. The BG's mandate is to be the municipality's resource group on social media and to serve coworkers. The BG members interact on social media like Facebook and Twitter, have a blog, and test and update themselves on recent developments within social media software. The BG consists of four persons: two males from the IT Department and one male and one female from the Communication Department. The BG has a head, who works in the IT department. The BG members working in the IT Department hold the positions of "IT consultant" and "training consultant". The two others are "communication advisers". Their ages range from late 20s to mid 30s. They are not trained as professional computer scientists, but work on the "soft" side of technology. Three have master's degrees in media and communication studies, while the fourth member worked as a teacher before joining the group. The members can be described as "early adopters" (Rogers, 2003). They are highly regarded localities and have extensive knowledge about social media. They are inspired by the cultural logics of the hacker culture and the open source movement. The BG is not a full-time assignment. Current members devote about 30–50 percent of their work time to it. They meet once a week, when they plan and discuss activities. Another aspect deals with initiating and implementing self-designed activities. An overview of the informants' backgrounds is presented in Table 5 in the appendix.

My approach to the BG follows the same research strategy as for the high school and represents a case study on how social media is used in the municipal sector. My first contact came at a workshop in September 2011. At lunch, I was seated next to the head of the BG. I was interested in their work and I asked if I could follow their activities. We swapped contact details. After that, I authored a note explaining my intentions. It was forwarded to the head of the IT Department. I also e-mailed them the DPOR's letter of consent. There was no formal meeting to clarify my research intentions. The head gave me approval to conduct my research. I was invited to attend the group's weekly meetings. I was given a token of trust, a guest ID card to the municipality's IT Department. I started the data collection in November 2011 and ended it in June 2012. My use of "in the field research strategies" followed the same method as described for my research at the high school. I structured my data collection around the BG's activities. This resulted in spending much time in the IT Department's office space, which is located in a town hall. I requested attending different activities. The group had certain compulsory

activities, like the weekly meetings that took place every Monday. The meetings started at 13.00 and lasted one or two hours, depending on the agenda. I would attend these as often as I could. After attending them for a while, I gradually pursued other clues, which were to trail the BG's activities. After some time, I requested if I could conduct in-depth interviews and get access to documents. I asked if I could attend their internal and external activities. These included their social media training courses and presentations at workshops and conferences.

I applied various research methods. These include interviews, passive participative observation, writing field notes and collecting written artifacts. My main method was semi-structured interviews with an interview guide. I conducted all the interviews on the municipality's premises. Seven interviews were completed, six between the informant and me as the researcher, and one where almost the entire group was present. Some informants were interviewed several times. Four interviews with the head were completed. Two additional ones were conducted with the members working in the Communication Department. I had one concluding group interview. The interviews lasted from one to three hours. All interviews were recorded on a digital audio recorder. I collected a variety of written documents, including web texts and internal and official documents. I conducted passive participative observation and wrote field notes. This took place in meetings, during interviews, and at the activities I was invited to attend. An overview of the interviews is found in Table 6 in the appendix.

The Lima Organization: The employees at the County Authority

The employees at the Lima Organization work at a County Authority (CA), which is a public administration body serving a population of 300,000 inhabitants. The County Authority shares the same geographic area with other municipalities, meaning that it is the first level of regional governance below state level. The County Authority has an elected body, the County Council, which is supported by the County Administration. The County Administration is led by a top management consisting of the Chief County Executive and the County Directors. Its main responsibilities are regional development, economic development, dental care, maintenance of roads, and high school education. The County Administration has eight departments: ICT, economy, law and acquisition, accounting, HR, real estate, archives and communication. The County Authority has about 2800 employees.

My approach to the CA was different than the two other organizations. My involvement was not part of an extensive engagement with the field. In January 2013, I started my efforts to find a case study that could show how an enterprise SNS is used in a municipal setting. Through connections, I wrote an e-mail, presented myself, and explained the intentions behind my request. I explained that I had been told that they had challenges in implementing their new intranet. I asked if they wanted to be part of my doctoral study. Afterwards, I was invited to attend a meeting with my new contact. Prior to the meeting, I e-mailed essential background materials on my study. I collected data from May 2013 to February 2014 by interviews and a couple of meetings with the project leader for the intranet. Three meetings were completed. I used two qualitative methods: interviews on telephone and collection of written documents. The interviews were semi-structured with the use of a guide. I conducted eight interviews, five by phone and three on the premises of the CA. All the interviews were one-to-one, meaning that only me as researcher and the informant were present in the interview setting. The interviews lasted an hour each. Each was recorded on a digital audio recorder and covered different topics. The informants were recruited by my contact. The informants worked in different departments and held different positions. The criteria for selection was that they were all users or involved in the implementation of the intranet. The informants' backgrounds and interview periods are displayed in Table 7 in the appendix.

2.4 Part IV: Data analysis

The proceeding section outlines the strategies I used to code, categorize, and interpret my data. This means addressing how I develop the four local models and the ways I performed my data analysis. To show that, I explain how I used aspects of the data analysis technique Grounded Theory, the coding strategy I applied and developed throughout the research process, how I practically performed my coding, and how I chose to present by data.

2.4.1 Views on coding and Grounded Theory

Qualitative researchers use various strategies to interpret data. Some use coding, which is a way to break down data into smaller pieces allowing analysis. There are various views on what it involves. Coffey and Atkinson argue that coding is not analysis, but a way to “encompass a variety of approaches to and ways of organizing qualitative data” (1996:27), as they remind us, it is the linking between concepts that marks the start of an analysis. Miles and Huberman (1994) contend that it *prepares* for data interpretation, as coding can be used to for simplification and complication. Tesch (1990) suggests a computer software approach, where it is part of a process, where data is first separated from its original context and reassembled under a new one, as a mean to find new ways of thinking about one’s data. Seidel and Kelle (1995) claim coding is a heuristic device, which can lead to discoveries.

The sociological data analysis technique of *constant comparative method* (Strauss & Corbin, 1990; 1998) from Grounded Theory (Glaser & Strauss, 1967) offers a more systematic way of coding. Grounded Theory (GT) is defined as the way a phenomenon is “discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon” (Strauss & Corbin, 1990:23). GT has since its introduction been contested and has generated a scholarly tradition which is applied in disciplines beyond sociology. GT has developed into sub-streams, like Straussian (Strauss & Corbin, 1990), constructivist (Charmaz, 2000) and feminist (Wuest, 1995). There are also views on how to perform it in practice. Following the breach between Glaser and Strauss in the 1990s, Glaser (1992) emphasized the researcher’s use of induction and creativity, while Strauss (Strauss & Corbin, 1990) is interested in a more systematic approach. There have been cases of experimentation where researchers have combined various methods to find new ways to code (Birks & Mills, 2011). Glaser (2009) has reviewed this, but has pinpointed that new techniques are not necessarily better than others. Gynnhild (2014) contends that GT is a demanding, as it is a form of “learning by doing” in which new researchers must have patience, exercise trust, be prepared to fail, be inductive, and have an open mind when coding.

Addressing the technique more firmly, GT starts with research questions rooted in the field in which the researcher interacts. It can emerge from a suggested or assigned research problem, be debated in the research literature, and be based on a personal and professional experience (Strauss & Corbin, 1990). Glaser (1978) argues that the researcher should exercise theoretical sensitivity throughout the research process. Strauss and Corbin (1990) contend that GT is orientated toward action and process. In order to achieve theory development, one needs questions that give the researcher flexibility and freedom to explore phenomena in depth. Strauss and Corbin (1990) argue that *concepts* play an important role here. Concepts are basic “building blocks” defined as “an abstract representation of an event, object, or action / interaction that the researcher identifies as being significant in the data” (Strauss & Corbin, 1998:103). Concepts give attention to a phenomenon and one starts to ask questions about it, foremost by introducing propositions. Strauss and Corbin maintain that “propositions permit deductions, which in turn guide data collection that leads to further induction and provisional

testing of propositions” (1990:62). If a researcher does not have propositions, which he or she can relate to concepts, it will be difficult to perform coding.

The GT literature gives different views on how to perform the coding process in practice. Moreover, we find different views on what the various phases of the coding process look like and consist of too, from the simplified to the complex. Hjälmhult (2014), for example, suggests three levels, *open*, *substantive*, and *theoretical*. The researcher starts with open coding. Here, one identifies statements and events. As new events are identified and compared with existing codes, these are grouped with other codes. It is important that the code itself reflects the phenomenon’s substance. Selective coding arises when the researcher finds the main subject matter. These turn into core categories which guide the research process and only similar categories should be considered. Theoretical coding is when the analysis consists of linking relations between categories and their propositions. The analysis continues until new theory does not require more categories but only confirms it. In the original framework designed by Glaser and Strauss (1967) and Strauss and Corbin (1990; 1998), one finds more detailed techniques and procedures. Strauss and Corbin also pinpoint that it starts with an *open coding* process, which they see as “the analytic process through which concepts are identified and their properties and dimensions are discovered in data” (1998:101). Open coding is about conceptualizing written statements from different sources and incidents. Strauss and Corbin (1998) recap the importance of concepts, moreover, that the *act of conceptualizing* and the ability to label and give name is imperative. Conceptualizing is the act of breaking down one’s data to see it in new ways, which provides the possibility to dig deeper into one’s data by giving it new labels. This will lead to a range of concepts and allow thinking in more abstract terms. The researcher then groups them into *categories*, which stand in relation to the concept. Strauss and Corbin also argue that categories can be divided into *sub-categories*, as they have different properties. This means that categorization stands for a higher form of abstract thinking than concepts. Strauss and Corbin suggest three ways of open coding: line-by-line analysis, sentence or paragraph, or perusal of entire documents. Strauss and Corbin propose *axial coding* as the next step, which is defined as the “process of relating categories to their subcategories, termed ‘axial’ because coding occurs around the axis of a category, linking categories at the level of properties and dimension” (Strauss & Corbin, 1998:123). This is a procedure where data are put back together in new ways after open coding, where the aim is to make connections between categories. This is a systematic way of coding, where one uses paradigms and axis to expand data. *Selective coding* is integrating and refining a theory that emerges from coding. This arises when the core variable, or what is thought to be the core, surfaces, which Strauss and Corbin call “*the main category*”. From here, Strauss and Corbin present different techniques and strategies dealing with refining the researcher’s theory, by systematically relating other categories and attempting to validate them. Strauss and Corbin suggest the use of a *conditional / consequential matrix*, which is an analytic device to help researchers think about how a theory connects to macro and micro conditions / consequences and to processes. The next stage is *theoretical sampling*. This means that the researcher looks for indicators that are theoretically relevant concepts, then compares these events for their properties and dimensions, and looks for range and variations. At the end of the process, the researcher can also use *memos* and *diagrams* to keep record of the analytical procedures, as it is always imperative to know the process leading to a new theory, before the final phase ends in addressing the scientific community about one’s new theory.

2.4.2 Coding: a strategy to organize and interpret data and to build models

As mentioned, I have been inspired by GT and here I will state some of my motives for using it. First, this scholarly tradition encourages researchers to engage in inductive and creative

thinking, a facet in alignment with my methodological orientation. Second, GT is a systematic data analysis strategy for working with qualitative data, a structured and organized approach that appeals to me as researcher. Third, I have used it as a way to organize and systematize the large amount of interpretations I have collected, which has helped me to prepare myself for data interpretation. Fourth, GT's focus on managing and organizing data into smaller units has been used to create new themes and categories, which I have used as a tool to compare with other relevant analytical frames, eventually to suggest nuances of new theoretical concepts. Fifth, parts of GT concentrate on understanding action and process, an attribute relevant to my work. Sixth, I used GT as a strategy to construct the dissertation's four local models, as a way to get into and portray the holistic and simplified in-depth representation of the life worlds of my informants. Finally, my application of GT deviates from and contradicts some areas as outlined in Strauss and Corbin's framework. I have not attempted to have a rigid focus on validation, which I interpret to be important in GT. Nor have I used coding strategies, like "axial coding" and "subcategories", but worked around *open coding*, with emphasis on finding concepts for the uses and practices connected to social media in organizations. I refer to them as "themes" in the data analysis section. I have not used any computer software to process my data.

In other words, I made a choice. I used aspects of GT and I practiced and developed an open coding strategy, motivated by interpretation, reflection, and the urge to explore. I have used it as part of an ongoing research process and it has served the purpose of identifying and conceptualizing *nuances* and *variations* in my data. Open coding has been used to interpret, manage, organize, and make sense of my data. It helped me in having a focus, when working with written documents like interview transcripts, official documents and digital contents. I practiced it often when I transcribed. I stopped and wrote notes, where I tried to interpret an informant's statement or to find key patterns and concepts. Other times I grouped and compared transcripts with each other to find overlapping concepts. This has also been applied when I have analyzed digital content. But open coding has mainly been practiced as part of a long-standing *writing process*, where I have produced large amounts of text. For example, I have written several research papers, as part of an intention to develop and enhance concepts, categories, and theoretical ideas. These have been presented at peer-reviewed conferences. In writing them, I have often drafted them with the data first, where *sub-headings* in the data analysis section are the "concepts", when using the Straussian approach. I have often swapped "concepts" with "themes" and used the citation of informants to legitimize it. Four published conference papers by peer-review have been produced this way (see: Haugbakken, 2013; 2014a; 2014b; 2014c). The flipside to this, however, is that I have made many sketches, as a way to think about my data. This is reflected throughout the thesis, as it contains many figures and tables. My open coding has been driven forward emphatically by asking the same question, "*What is the story here or what is this a case of?*", as a strategy to explore the data I collected. This has been essential to enforce the intention of performing an explorative, inductive, reflexive, and interpretive study.

There is another sider, which concerns my use of the term "model", moreover, its link to my open coding strategy. Open coding has been used as a *tool* to build the dissertation's four models. Coding has often been my *starting point*, leading me on a path to *conceptualize a practice, an event or a phenomenon I have had difficulties in framing*. I have actively labeled and conceptualized my data, especially the transcribed interviews and written documents. I have given them different labels, perhaps, tags or names, written short notes, and made sketches, based on user stories, for example. I have asked myself; what are they saying beyond the spoken word? What do they represent? This shares similarities to a *GT open coding strategy*. Performing this coding over a longer period, nonetheless, led to personal *clarification*, resulting

in a framing of a substance or subject matter I considered to be important in my work. This would, according to Strauss and Corbin's (1998) terminology, be called finding the main "core category", which surfaces when the researcher has clearer understanding of what he or she studies. When this has been a reality, I often came upon a significant feature. Depending on its nature, I used theoretical sensitivity and consulted the relevant research literature to find similar empirical results or theoretical concepts which could clarify my understanding. I attempted to connect my data to the appropriate theory. This led me to have an analytical understanding, giving answers to my research questions. Reaching this point, I have performed a *choice* and used the analytical term "model" to describe the events, practices, and interpretations my informants have been involved in when using social media in an organizational setting.⁴ In brief, I use the term "model" as a simplified representation of reality, but also as an overreaching category describing the integrated activities of which my informants have been part. I applied it to get a better analytical wrapping of the life world of my informants, but most crucially, to frame social media from an actor's perspective. The next section gives practical and detailed examples of how I performed my open coding practice to build my models.

2.4.3 My coding in practice – examples considered

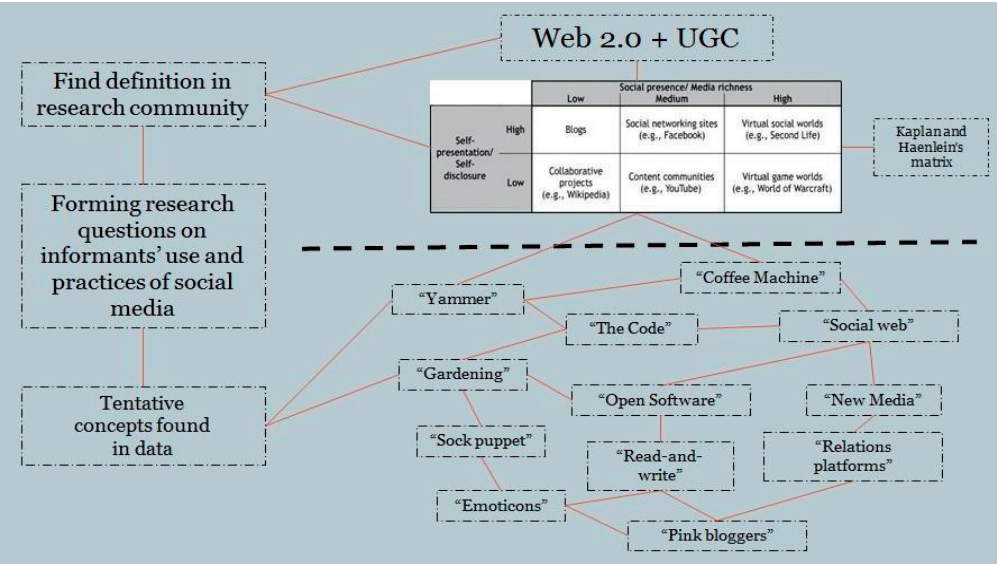
My open coding strategy can be divided into phases, consisting of a larger research process. First, I used research questions in my field as a starting point. The first challenge was framing "social media". I needed a tangible understanding of the technology. Could SNS and mobile apps be defined as the same? What about e-mail? I browsed academic journals for definitions and encountered that of Kaplan and Haenlein (2010). They defined social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (2010:61). Kaplan and Haenlein created a useful matrix whereby they defined six different social media types and proposed what characterized them according to different dimensions. These are (1) *collaborative projects*, like Wikipedia, (2) *blog*, (3) *content communities*, like YouTube and DailyMotion, (4) *social networking sites*, like Facebook, (5) *virtual game worlds*, e.g. World of Warcraft, (6) and *virtual social worlds*, e.g. Second Life. The definition and the matrix meant that I had concepts that I could relate to, allowing me to operationalize my study.

The next phase involved collecting data by qualitative methods. The phase of the coding strategy is displayed in Figure 2.1. I framed many of the research questions in light of the mentioned matrix; how did my informants use, interpret, and evaluate blogs, Facebook, Twitter, etc.? What are the users' experiences? This probing proved to generate exposure to many similar and new concepts. Informants used other terms and expressions interchangeably about the same topic. They talked about "new media", "open software", "the code", "social web", "relations platforms", "read-and-write", "guidelines for proper use", "Yammer", "context", "coffee machine", "gardening", "", "privacy", "sock puppet", "meme", "bitcoin", "pink bloggers", "emoticons", "MOOC", "hacktivist", "4chan", "LulzSec", "Operation AntiSec", "Satoshi Nakamoto", etc. I came across variations of Kaplan and Haenlein's definition in various public organizations. On web pages administered by certain Norwegian government agencies, for example, I found variations. These stressed the importance of "Web 2.0" and "User Generated Content". Others emphasized that social media was a low-threshold technology. The informants used "social media" interchangeably with social network site, like Facebook and Twitter. The informants organized themselves in different ways, by using "bits and pieces" of what we see as social media and giving them new meanings and names. This revealed that Kaplan and Haenlein's definition contradicted uses and practices I observed. The

⁴ My theoretical views and use of the term "model" is discussed in the next chapter.

model proved to be *technical* and seldom accounted for the social complexity and patterns of variations stemming from social life I encountered. The model could not explain my data and I determined it incongruent for future use.

Figure 2.1 The first phase of the coding strategy.



In the next phase, I realized I was confronted with a variety of concepts and uses, meaning that I had to think more narrowly. Much of the initial open coding started with the student case. I interviewed the students about their uses, practices, and evaluation of the six types of social media. I asked them about how they used blogs, wikis, Facebook, Twitter, and YouTube, and if they gamed. The interviews indicated interesting patterns, which I explored in the other interviews with other students. Some students told me they used Facebook to share and organize their schoolwork – at a high school where the same technology was blocked. I transcribed the interviews and started writing short papers to structure my ideas and thoughts. I read through the transcripts and started looking for key patterns and other significant uses and practices. Some appeared to be connected and others were not relevant to answering my research questions. I started grouping the statements against each other, I compared them, contemplating different meanings and what types of label I should put on them. To illustrate how I performed my coding strategy, I will provide examples.

Table 2.2 presents a sample of quotations from interviews with students. They relate to how the students used and evaluated Facebook and YouTube. Quotations 1 to 3 deal with Facebook groups, but give slight nuances. The quotations had larger overarching themes, which could be subject to labeling and the identification of concepts. These are listed in the column “Initial Labeling”. I soon weighted some as having more importance than others. I created criteria, as certain quotations described Facebook groups as “bulletin boards”, like quotations 1 and 2, while number 3 is a statement about “collaboration”. Consequently, they became labels or themes, but were soon related to a larger predominant label; they all dealt with aspects of *formal learning*. Quotations 4 to 6 follow the same coding strategy, but deal with use of YouTube to learn more about hobbies. Several students explained that they watched YouTube videos to develop their hobbies, like playing musical instruments and to learn new games. The quotations

had nuances. Quotations 4 and 5 deal with how to play guitar and piano, while number 6 is about gaming. I tried giving them an all-encompassing label. This became “informal learning”.

I started to apply these patterns to a larger perspective. I realized that almost half of the students I interviewed used social media this way. On an aggregated level, coding the answers this way showed me that students coordinated activities across different social media platforms. The students used and created Facebook groups, talked on Skype, and co-wrote in Google Docs, to discuss and complete assignments given by their teachers, as well as using YouTube tutorials to maintain and develop their hobbies, a coordination of activities that took place in a context characterized by organizational control. The students’ teachers knew little about this coordination of learning activities. The analytical challenge was: when you encounter such a type of socially constructed grouping, what do you call “it”?

Table 2.2 Example of labeling student statements.

No.	Informant statements in interviews	Initial Labeling	Condenser labeling
1.	“We have a class group, we have our own Facebook group. When we have tests, for example, we can share cram sheets. If there is someone who has not done their homework, then we can share, so we can talk to each other, what is our homework for the next day, what is the work for the next week. In that sense, it is very convenient.”	Facebook groups Bulletin board	Formal learning
2.	“Yes. We have a class group. There we talk about what homework we have and what tests we are going to have, stuff like that.”	Coordination site Practicalities Information Collaboration	
3.	“And when all of us were going to contribute in the written part, I was very nervous, because I’m not so good in writing Norwegian. And then I sent it to the people in the group, so that they could look through it, what I should write more about or what was wrong. Just to be sure it was correct what I had done. So, I got good feedback. It helped me a lot that we had a Facebook group. I got to hear ‘It was awesome, but I think you could write a bit more about fish farming on Salmar too.’ And then I wrote a bit more about that. And the others would look at it and then it was time to hand it in.”	Project work Positive Homework School related Study tools	
4.	“For piano, chords, learning stuff, like that. I have always played by listening, but when I come to a point in the song, where I don’t really know where I’m going, I go on YouTube. Then I see how they play, how they press the keys. So there are many ‘how to play videos’, which I have been watching.”	YouTube Instruments Music Gaming	Informal learning
5.	“If I am playing a game, for example, and I need a guide, which shows me how I do it, then I watch that.”	Connecting Hobby Music theory Manuals Friends Collaboration	
6.	“Most times when new games are out, all my mates meet to find out more about it. We often sit and look on YouTube to see new things. It happens when we have to learn this and that, and that’s the way to do it. It’s really that way we use YouTube.”	Home Tutorials	

Thus, I had located a core category. The next step was to find similar empirical descriptions in the research literature. I exercised theoretical sensitivity and attempted to locate similar research traditions. I systematically searched academic journals and books, looking for similar concepts and research findings. I interpreted that the students' user patterns shared similarities to the concept of Barron (2006), who argues for a learning ecology perspective. I decided to expand on Barron's work, but the difference was that my model showed that this "something" operated in the "shadows" of an organizational setting or learning institution. The model became the "*shadow student learning ecology*", which I developed in two published conference papers, "The Student Learning Ecology" (Haugsbakken, 2014c) and "Connecting the dots by Youtubing tutorials" (Haugsbakken, 2014b). The model is analyzed in Chapter 4.

On the other hand, this coding strategy then served as a *template* for organizing and interpreting data and for constructing the models in the three other cases. But there are slight nuances; while the first model is my suggestion, the three others, "*authentic learning situations*", "*relation platforms*", and "*2.0 Social Intranet Portal*", are descriptions or cultural scripts that the informants themselves have produced to describe local initiatives on social media in organizations. Open coding has here served the purpose of providing depth and substance to how social media uses and practices in organization can "work" and, moreover, how these might be connected and contradict larger organizational discourses and institutional logics. I will give an example.

Table 2.3 Example of labeling social media in beta group.

Year	Key words in blog posts and interviews	Initial Labeling	Condenser labeling
2008	Open Source Movement, Web 2.0 Services, Project Number, Group in IT Department, Formal Support from Head, Naming of Group, The Marketing People, the "MBAs", Other Betas	The condition at starting up Looking to others for inspiration Making sense of social media	Discovery
2009	WordPress, Yammer ELGG, Twitter, Laconica, Identica, The Wire, Origo, Wikispaces, SlideShare, Flickr, Plugins, Tagging, VirtualBox, Chrome OS, "Hey wiki wiki, wiki you are alright", "Noise", "Facebook at work", "Youtube for presentation", "Small-talking"	Setting up web community Getting experiences	Testing
2010	Google Wave, Todo Wikia, Yahoo Pipes, Simple Pie, Yammer, Netvibes, Google Reader, Google Desktop, RSS Feed, Goal thinking, Target Group, Representation online, Guidelines	Established as group Legitimizing Internal battles	Formalization
2011	Mantis, Elgg, Status.Net, Zoho, Google Docs, Google Wave, Teamlab, Teambox, Open Project, Yammer, Twitter, Facebook, WordPress, Wikispaces, My Feed, Creative Commons, RSS, Google Calendar, CoTweet, DestroyTwitter, Tweet Deck, hashtag, Prezi, Kundo, Beyond Bullet Points, "the silo effect", "water-cooler effect", "coffee machine effect", "what's in it for me", "distortion and small-talking", "listen, share and be relevant", "trolls", "skimming competence", #hashtag, @mentions, "trial and error"	Goal thinking Recommendations on use	Strategy work
2012	Yammer, Facebook, Twitter, Co-Tweet, DestoryTwitter, TweetDeck, MSN Messenger, Google Talk, Lync, eDialog, "Relations platforms", gardening, #SoME, "pointing media", "medium of the moment"	Credibility among peers Teaching	Googled and educating

The model “*relation platforms*” is based on the social media competence group’s self-constructed definition of social media, which I analyze in Chapter 6. While the model was set, my coding has been applied to trace features of the group’s history and how they have interpreted external influences connected to social media to create their own definition. Coding has been applied to explore the variety and challenges taking place in internal organizational processes in a public administration. Coding has been used to label and categorize themes, by reading through the group’s blog posts, posted on their blog from 2009 to 2012, combined with transcripts from my interviews. First, for each year, I labeled the vast quantity of social media terminology the group used, combined with key words. Second, I gave them larger concepts, and third, I had core categories which could indicate what the important theme was for each year. Analyzed retrospectively, one can identify that each year is dominated by a particular theme, forming a history. For example, 2008 was about “discovery”, where the group conducted their own research on social media and set themselves up as a group, while in 2009 they tested out social media application in the municipality, and so on. My coding strategy for two last models follows the same approach.

2.4.4 From coding to data presentation

The outcome of the coding of my data requires it to be presented in a conceivable and logical arrangement. Fulfilling this, I have used narratives combined with rich contextualization as the criteria for presentation of the data. In a way, I have employed storytelling as a means to present my data analysis. This has been used to illustrate the nuances and dynamics of the four models which are framed as representation of the informants’ life worlds, to illustrate how actors use and perceive social media in organizational life. This form of data presentation is applied in the four data analysis chapters, which I regard as the groundwork of my dissertation. Each of the four data analysis chapters follows the same template for data presentation, where the coded themes are elaborated with the informants’ interpretations, added to the other relevant data evaluated to be necessary to contextualize the subject matter at hand. This means that the data analysis of each model is presented as four different case stories.

These can be seen as “factual events”, about evolving events in organizations, led on by features I have seen as important to my data analysis. This means that my coding, the suggested model, and the prepared stories, are connected to my assessments, implying that some data have been omitted while others are included. The impact of social media on organizations provided me with a possibility to describe a rich case, meaning that I have intentionally picked out and composed data to become stories, to illustrate the challenges posed by implementing new technologies. The way I have coded data and presented them could therefore be similar to the challenges posed by Geertz (1973:9), who argues that “what we call our data are really our own constructions of others people’s construction of what they and their compatriots are up to”. This is similar to the reflections of Strati (2000), who argues that organization researchers who study organizational life from the inside make distinctions between *first- and second-order concepts*. First-order concepts are those made by the subjects who work in and are connected with the organizations, while second-order concepts are those made by the researcher to describe the meaning, patterns, and relevance of the first-order concepts that he or she has collected. Strati argues that such distinctions are drawn due to the fact that it is not always clear how the organization presents itself in the field. Second-order concepts are therefore the “interoperation of interpretation” which researchers use to engage with other researchers to make sense of the organization. To a certain extent, the four stories I have made can therefore be seen as produced research knowledge, allowing me to engage with other organization researchers to discuss what the current challenges facing organizations are, when responding to new web participative-based technologies.

2.5 Part V: Research ethics and quality criteria

My choice of methodological orientation – choosing to engage closely with the field and individuals affiliated to organizations – influences the research ethics. Researchers can develop close relationships with informants, making it challenging to give them anonymity. The Norwegian research community has its own standards to accommodate this, organized and administered by the organizational body The Data Protection Official for Research (DPOR),⁵ which is placed under the Norwegian Social Science Data Services (NSD). The DPOR has many obligations connected to reviewing research projects against the requirements of the Personal Data Act and the Personal Health Data Filing System Act. It advises on how research projects should be conducted according to Norwegian law and research guidelines on user privacy. The DPOR acts as a body safeguarding privacy in research on human subjects.

Before I started my data collection, the project was registered at the DPOR in August 2011 and cleared the same month. I reported my intentions, the project's scope, where it was formally anchored, an assumption on my data sample, how I would recruit my informants, my criteria for choosing my informants' social background, what type of methods I would use, research sites, what type of data I would ask for, if I would ask for any sensitive data on informants' backgrounds, how the methods were to be applied, etc. The DPOR advises that all researchers shall use and present a letter of consent, which is to be shown to informants before the data collection starts. The letter of consent is intended to notify informants about matters like the intention and scope of the research project, that participation is voluntary, about secure data storage, data presentation, etc. – aspects that are important to safeguard the anonymity of informants.

In this research project all my informants have signed the letter of consent. They have all volunteered to be part of this study. The data presentation faces challenges and contradictions in order to comply with the criteria of full informant anonymity. The Norwegian social media research community is very small and so are the case-study organizations. Some informants, for example, engage in public debate and speak openly about their work on social media platforms and in local and national press. Some take an active and leading role as change-agents too, a factor that makes it challenging to safeguard the anonymity of informants and the organizations they work for. There is a risk they could be identified, but my informants are aware of this matter. I do not name my informants nor the organizations they work for in the dissertation, but I use numbers and pseudonyms as a means to safeguard informant privacy.

2.5.1 Validity, reliability, and generalizability

Qualitative research is criticized for bias, implying that modes of subjectivities can mold and influence conditions like research results, the techniques applied for collecting of data, and data presentation. Such aspects can influence scientific criteria such as validity, generalizability, reliability, and objectivity. In that regard, principles like falsification or verification are deemed difficult to fulfill, entailing limitations of my study. Justesen and Mik-Meyer (2012) argue that validity is defined as a scientific criterion aimed at establishing if conclusions or measurements are well founded and correspond to what has been measured, while reliability refers to whether a study's methodology is well defined so that future researchers can employ the same design and achieve the same results. Justesen and Mik-Meyer maintain that researchers significantly

⁵ See: <http://www.nsd.uib.no/personvern/en/index.html>

disagree on such criteria and employ them differently, depending on scientific points of view and adherence to different research traditions.

As I pointed out at the beginning of the chapter, this dissertation adopted and is inspired by a methodological orientation rooted in social phenomenology. This has implications for the relevance and degree of such quality criteria and other similar criteria. As Justesen and Mik-Meyer (2012) contend further, validity and reliability are often associated with or embedded in positivist and realist research traditions. Their relevance is manifold and takes on a substantive form. I have from a social phenomenological stance been interested in providing a rich, detailed, and specific account of social media from an actor's point of view or life world, implying that, for example, laboring generalizable statements based on a representative population is somehow unnecessary. I do not claim to have studied a representative population, as I do not see that this is the objective of qualitative research. My views therefore align with those of Yin (2013) and Kvale (1996). If generalizabilities transpire here, they are to be seen as *analytically* intended for scholarly debate. I do not claim, however, that my study is generalizable to all users of social media in organizations. The representations and descriptions I provide correspond to the experiences of my informants, and them alone.

This means that the principle of intersubjectivity plays an important role. Justesen and Mik-Meyer (2012) argue that this has some elements overlapping with validity, which is understood as agreement on a given set of meanings or a definition of a situation. I evaluate this to be consistent in my study. I have, for example, shared drafts of my dissertation with my informants to ensure that my accounts are accurate. They have read through them and I have explained to them my analysis and conclusions. From a social constructionist view, on the other hand, I have enforced a degree of reflexivity, in order to fulfill some basic requirements on validity and reliability. This makes it difficult to claim that the dissertation is "objective", but I have attempted to present the material as neutrally as possible and to respect the work of my informants. Consequently, the proceeding chapters are not the result of arbitrary thinking. Throughout the research period, I attempted to establish what the use and practice of social media "is". This may be difficult to define, but this also applies to a number of subject matters in various forms of research. One way for me to distinguish what the fluidity of reality "is" can be achieved by discussing it with others and getting their reactions to my work. This implies that the proper value of my work is to establish a distinction from idealized beliefs on the ways research should be conducted. The basis of my research is the acknowledgment of understanding that it takes part in the ordinary life of the subject matter I have studied for four years. Validity and reliability can only be dealt with than any other way than framing it as part of an human experience, which means understanding that this emerges from the complex process of negotiative conflicting ideas and recognizing the viewpoints of the significant other. Here, validity can be classified as a generalized aspect, transpiring from multiple ongoing intersubjectivable deeds.

2.5.2 Summary

The purpose of this chapter has been to account for the dissertation's methods and research strategies. The first part established the background and the incentive for initiating my study. I emphasized that one of NTNU's strategic priority areas in research on ICT, *ICT in the Norwegian Public Sector*, announced a national public call in February 2011, inviting applicants to design a tangible PhD study on the complex links between "social media", "sharing culture", and the "Norwegian Public Sector". I responded to that with a research proposal. The second part accounted for my methodological orientation. I outlined that this is a qualitative study. I stressed that I attempt to extend on a scholarly research tradition in

organization studies which has applied different research qualitative strategies to study organizational life from inside an organization. Potential challenges posed by applying this methodology were also reflected upon. The third part explained the research process. I attempted to summarize my initial research design and addressed how I operationalized it. I also outlined the data sample, the methods I used, and how I approached the various organizations I visited in the field. The fourth part considered the techniques I used to code, categorize, and interpret my data. I addressed how I developed the four local models and the ways I performed my data analysis. I explained how I used aspects of the data analysis technique Grounded Theory (GT), the open coding strategy I applied and developed during the research process, how I performed my coding practice, and how I chose to present my data. The last part considered issues like research ethics, validity, reliability, and generalizability. The next chapter will establish the research perspective.

3 Research Perspective

This chapter establishes the research perspective. This is outlined over the chapter's four parts. The first part frames an initial argument aimed at positioning the dissertation in relation to a research tradition, on which I intend to expand and to which this research will contribute knowledge. I show that the organization studies community currently urges scholars to study the role of technology in organizations in order to fill a gap in the research knowledge, which also includes knowledge about social media. Current definitions of social media and a crossing research trajectory are examined, before I address how particular conditions associated with social media suggest that one can use both bottom-up and top-down perspectives to understand how social media is adopted and implemented by organizations. The second part constitutes the study's theoretical foundation. I address important research perspectives on how organization studies have addressed the role of technologies in organizations, especially how organization researchers have begun to pay attention to theorizing the implications of social media for organizational life. I extract and introduce key concepts from this research discussion to form my research perspective and link them to the study's four models. The third part outlines the study's relevant research horizon. I am interested in establishing current research results on the use of social media in organizational contexts. I limit this to two research streams. In the first, I describe empirical findings produced by organization researchers on the use and practices of social media in organizations. In the second, I look at how educational researchers have examined the use of the same technology in education systems for learning purposes. The last part summarizes the chapter.

3.1 Part I: Addressing the research gap, framing a research perspective

Mintzberg (1979) argued that it is hard to imagine organizations without technologies, as they are a backbone helping humans to organize, coordinate, solve tasks and work. Other organization researchers claim this is a reality, as the role of technologies in organization studies is underresearched. This has led to acclaimed organization researchers having issued calls to the organization research community, encouraging students to take a greater interest in technologies. Orlikowski and Scott (2008) performed an impressive review of leading peer-reviewed research journals in organization studies to establish the level of research interest. Based on an analysis of 2027 published scientific articles covering the period from 1997 to 2006, they found that only 100, roughly 4.9 percent of their data sample, directly addressed the role of technologies in organizations; hence, around 95 percent of the research articles did not consider the subject. This finding is contradictory, Orlikowski and Scott claim, considering that former organization scholars studied technologies in great detail. They suggest different explanations for this contradiction. It could be that the growing complexity and specialization of organizations demands complex approaches; that the lack of interest in addressing material aspects is influenced by the fact that immaterial features dominate the research agenda; and that there could be a belief that technology is a type of accessory that does not require particular attention from the organization research community.

Treem and Leonardi (2012) make the same observations as Orlikowski and Scott in their research review on the role of social media in organizations. This review concludes that social media is overlooked in organization studies, whereas other cross-disciplinary fields like media and communication studies, subjects within the field of Human Computer-Interaction, and business and marketing subjects, have examined it in great detail. Treem and Leonardi identify additional challenges with the current research horizon in organization studies. They argue that researchers produce bold statements, claiming that the development of social media will

outpace organizational processes and transform organizations on an unprecedented scale, a picture usually conveyed in the international business press, but that this produces contradictory research findings. One knows little about the consequences of social media on organizing, as many studies and definitions of social media are too technical. Solid research is a scarce commodity and we have limited knowledge on how social media is socially *constituted* and *embedded* into organizational life. Consequently, organization researchers urge future students to pick up the relay baton and map empirically how people *use* technologies across organizational contexts, an argument put forward by several acclaimed organization scholars (Leonardi & Barley, 2010; Leonardi, Marleen, & Steinfield, 2013; Orlikowski & Scott, 2008; Treem & Leonardi, 2012). I have answered this call and attempt to expand on the mentioned research tradition with this study.

3.1.1 Current definitions of social media

Social media is subject to theorizing (Han, 2010; Song, 2010). Researchers argue that social media is difficult to define (Aalen, 2013). Looking at the most frequently cited definitions, Kaplan and Haenlein define *social media* as a “group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (2010:61). Other scholars have contended that social media is an electronic tool that contributes to the creation of ties, communication, and collaboration (Jue, Marr, & Kassotakis, 2010). Boyd and Ellison define SNSs, which is often used interchangeably with “social media”, as “web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other user with whom they share a connection, and view and traverse their list of connections and those made by others within the system” (2007:211). Haugseth defines social media as a “digital technology that enables public group-based interaction or participation and that transfers personal or social markers together with a media message” (2013:48). We find definitions linking social media use to organizations, such as that introduced by McAfee (2009). McAfee’s *Enterprise 2.0* is “the use of emergent social software platforms within companies, or between companies and their partners or customers” (2006). Leonardi et al. (2013:2) introduced a similar definition, *Enterprise Social Media*, defining it as

“web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited, and sorted by anyone else in the organization at any time of their choosing”.

Researchers have proposed different types of social media. Kaplan and Haenlein (2010) identified *six* types of social media: (1) *collaborative projects*, like Wikipedia, (2) *blog*, (3) *content communities*, like YouTube and DailyMotion, (4) *social networking sites*, like Facebook, (5) *virtual game worlds*, e.g. World of Warcraft, (6) and *virtual social worlds*, e.g. Second Life. Haugseth (2013) has suggested *ten* social media: (1) *SNS*, (2) *blog*, (3) *gaming*, (4) *collaborative projects, wikis and crowdfunding*, (5) *discussion forums*, (6) *web conferences*, (7) *virtual worlds*, (8) *content communities*, (9) *location based communities*, and (10) *streaming services*.

These scholarly contributions have strengths and weaknesses. They help us to frame the structural, technical, and material properties of an ICT. The definitions teach us that social media is characterized by a high degree of media richness and describe the technology from a static and system approach, for example. On the other hand, the definitions omit certain important aspects, which I believe have a bearing on our current understandings – that social

media today is formed and governed by the actions of its users, a factor that has analytical consequences for the dissertation's research perspective. I argue that social media is increasingly *user-driven*, a condition allowing humans potentially to perform and take initiatives to construct and enact social organizations or emergent social structures around an established cloud-based technology structure, an aspect that current definitions do not adequately highlight. This condition is facilitated due to structural changes and ongoing development of the Internet. This implies that it would be more apt to suggest that social media expands on an established past and a set of principles.

These changes can be better illustrated in light of the symbolic abolition of a top-down editorial regime, which acted as the public gatekeeper of digital content. In a sense, we can envision that we are currently in a "Web 2.0 era", reflecting the fact that we have progressed from the Web 1.0 era and now face the transition to Web 3.0 (Berners-Lee, Hendler, & Lassila, 2001). Web 1.0 refers to an early stage of development of the World Wide Web and is used to describe how web pages were organized during the Internet bubble era. Web pages were static and invited little interaction, meaning that users had a "read-only" relationship with them. It was common for web pages to be monitored by a top-down editorial control regime. In this regard, Web 2.0 marks a transition. O'Reilly (2005) describes Web 2.0 as a set of practices and principles that introduced a *participatory platform* (Bucher, 2012). Web pages were no longer static but dynamic, meaning that end-users could engage with each other in new ways through online interaction. The top-down editorial regime is symbolically abolished when we see a change from "read-only" to "read-and-write". These combined factors lead us to see that social media can facilitate what Jenkins (2006) calls a *participatory culture*. End-users can generate, publish, and manipulate web content and the term *user-generated content* (Van Dijck, 2009) arises. Social media's user-driven features enable people to engage with others at very low cost, meaning that we have many editors who become responsible for what they publish and how they interact. It would then be accurate to describe social media as Shirky (2009) puts it, "Here comes everybody". In this thesis, I understand social media as a new web technology, characterized by being a low-threshold, interactive and participative-based technology used for social interactions, which is used for creating, exchanging, and sharing of information and ideas in online network communities.

3.1.2 The network research trajectory

The conditions suggesting that social media is user-driven are many. But this can be better illustrated in light of an influential research trajectory that has theorized the potential implication for society at large of the combined forces of the Internet, ICT, and the Information Age, which can be called the *network research trajectory*. Because, what is "new" about social media? Critics argue that there is little difference between the terms "Web 1.0" and "Web 2.0", as the only distinguishing feature is a matter of mere figures. An end-user with some html knowledge could set up a web page and engage with peers in the 1990s, for example. Moreover, commentators have claimed that "Web 2.0" is a buzzword and marketing construction. Furthermore, there were several online communities in existence before Facebook rose.

Steen-Johnsen, Enjolras and Wollebæk (2013) argue that the "new" in social media is how it allows people easily to *build, institutionalize, and organize social networks* in new ways. Users can easily create user profiles, and engage with new people on the hundreds of social media services pushed onto the global market. From the end of the 1980s, scholars have theorized the implications of this aspect in a larger perspective. Scholars argue for the reorganization of an old social structure, the *social network*. Today, social networks take on a different meaning, as people have extended their social ties into the "computer networks of the networks" and

communicate through them and create new concepts of public spheres. These are said to be transgressing social structures keeping societies intact. The Spanish sociologist Castells (1996, 1997, 1998) has argued for the emergence of a new key social structure, the “network society”. Castells sees the network society as the “new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture” (1996:500), reflecting a society where the key social structures and activities of the social network are organized around electronically driven information networks. A consequence of these conditions is the rise of the *Individual Self*, which implies that humans now construct meaning and identity from their ties in social networks over and above other social structures. The Dutch sociologist Van Dijk (1999) has theorized a different side of the network society. Van Dijk suggests that key structures like groups, organizations, and communities still play a role in our understanding of the network society, though humans are still connected to social networks. Van Dijk’s project is to link the connections between social networks and new media networks. This feature is propelled forward by the convergence between different types of human and digital communications and media organizations into a single medium, the Internet. Consequently, these aspects are said to be rewriting the conditions for human communication, as the traditional interpersonal or face-to-face communication in social networks diminishes and is “transferred” and performed digitally, in addition to being stored, replicated, and searched, and is relatively transparent and accessible by others.

Scholars have theorized the user-driven nature of social media from other standpoints. Benkler (2006) has explored the argument that humans can organize and collaborate on social media applications to initiate potential change in the economy and society. Benkler argues for the rise of what he calls the *Networked Information Economy*, a “technological-economic feasibility space” that provides persons with increased autonomy to empower themselves. The Networked Information Economy can be seen as a potential source of grassroots power. And since social media is easily accessible, individuals can use their individual autonomy to exercise critical thinking by joint public participation and engage in digital production. This aspect can create a self-critical public culture which can turn users from passive to active, and into critical thinkers who raise social concerns. It is a source of power that recognizes that decentralized individual actions can remove physical and economic constraints. This argument ascribes to human mobilization by use of social media and ICT – social networks – the capacity to be a form of decentralized and distributed source of power that can challenge centralized power structures in society at large. Scholars like Wellman (with Berkowitz, 1988) have theorized different arguments. Wellman and Rainie (2012) argued for the rise of *network individualism* which suggests a radical rewriting of the meaning of social relations in which individuals engage in their social networks. In a populist tone, they argue that intense and increased social interaction and incorporation of the Internet and cell phones into social life have made humans more “addicted” contacts with other humans than before. This changes how we interact with one another. Wellman and Rainie’s academic point is that people have now become *networked as individuals*. This means that humans define and draw their social identities and belonging from the *person* rather than from belonging to traditional key social structures like the family, neighborhood, school, work unit, village, and hierarchical bureaucracies. Rainie and Wellman (2012) understand networked individualism as an “*operating system*”, which illustrates the new ways people connect, communicate, and exchange information by use of network technologies.

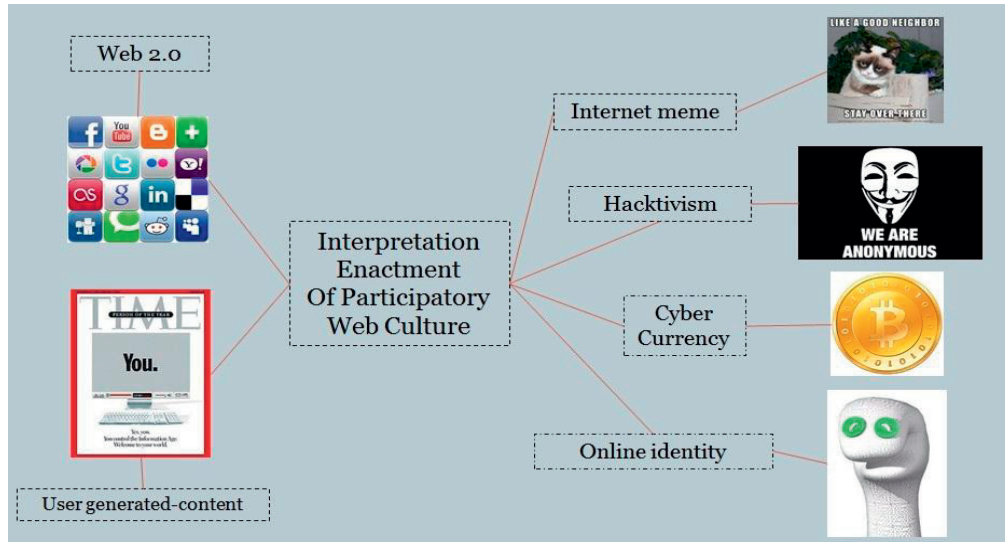
The user-driven nature of social media has been approached from other perspectives. People’s increased urge for connecting, interaction, and registration on SNSs means that our social life in social networks becomes subject to scrutiny. This has caused new interest for a sociological

and anthropological research tradition of kinship and social ties, Social Network Analysis (SNA). SNA represents a different approach than the network society argument, as it deals with the particular dynamics of relationships within and across small- and large-scale networks (Watts, 2003). SNA has been used to study the ways in which actors communicate in networks (Katz & Blumler, 1974; Katz & Lazarsfeld, 2006; Katz & Rice, 2002), implying that social networks are closely linked to the concept of communities. Granovetter's (1973) *the strengths of weak ties* has been a much used approach, although he never addressed the role of the Internet in his influential paper. Granovetter's work explains the relationships between strong and weak ties concentrated around a node in a network, a concept that has cast light on concepts like *social capital*. Social capital has been associated with the work of Bourdieu (1986), Burt (1992, 2005), Coleman (1988), Lin (1982, 2001), and Putnam (2000). Other writers and scholars have attempted to explore the various ways in which personal coordination of ties in online networks can facilitate various forms of individual and mass collaboration. Rheingold has forwarded various concepts illustrating this aspect, like *Virtual Community* (1994), which refers to how online networks of individuals interact through web applications. More recent concepts are *Smart Mobs* (Rheingold, 2002), which refers to how social media can be used to coordinate social movements. Scholars have suggested terms like *Wikinomics* (Tapscott & Williams, 2006), *MacroWikinomics* (Tapscott & Williams, 2011) and *crowdsourcing* (Howe, 2008). These claim that social media applications open the way for mass collaboration. Shirky (2009, 2011) has endorsed his support for crowdsourcing, arguing that social media lowers the threshold for forming new social groups and forms of collaboration. Castells (2012, 2013) has analyzed how social media can be used to generate forms of grassroots movements and political mobilization.

3.1.3 The challenge of approaching social media for organization researchers

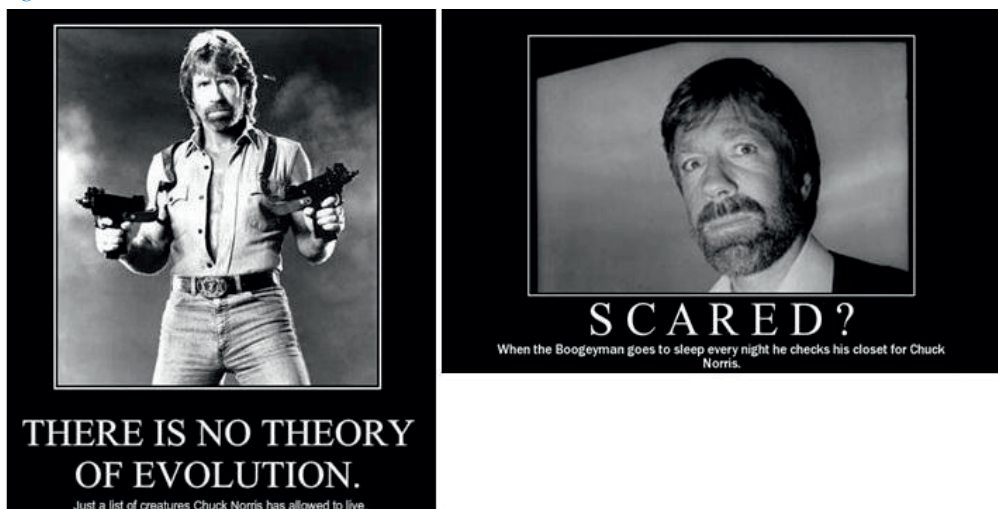
The research challenge for organization researchers is therefore to frame analytically the implications of the particular conditions, opportunities, and limitations provided by use of social media, especially when they are brought *onto the turf of an organization* by initiatives carried out by local actors affiliated to organizations. This facet is important because the plethora of social media services allows users easily to start engaging with their peers at low cost and to build, institutionalize, and organize social networks by use of social media. These properties mean that humans can, by forms of individual enactments or mass collaboration, use social media's participatory digital culture to produce *new emergent social structures*. Moreover, humans can use social media to coordinate and organize activities in new and unexpected ways by embedding the technology into established social practices, which can produce techno-social organizations that initially are difficult to define and can appear ambiguous and must be made sense of in organizational life.

Figure 3.1 Illustration of how interpretation and enactment can produce organizing.



I stress this aspect, because over the last years this has been a tendency in the social media landscape. Here, the links between human initiatives and recurring engagement with social media platforms have created, produced, and constituted a range of mediated social media phenomena in *society at large*. They are the end result of human creativity, innovativity, and engineering and are guided by their own cultural logics. Characteristic of them is how humans recombine aspects of Web 2.0 applications and user-generated content with social practices and employ human interpretation and actions to give them “social life” and new meanings and labels. These are continuously evolving and reshaped by the contributions from social media users and are socially constituted, as illustrated in Figure 3.1. Many social media phenomena illustrate these dynamics.

Figure 3.2 Internet memes of Chuck Norris.



An emerging social media phenomenon challenging established institutions is the arrival of *cyber currencies* or *cryptocurrencies* like Bitcoins, Auroracoin, BlackCoin, PotCoin, etc. Cryptocurrency can be understood as a decentralized medium of exchange using cryptography to secure economic transactions and to control the creation of new units. It is in stark contrast to currencies issued and controlled by centralized banking and economic systems. Bitcoin is the most widely known digital currency; it is starting to be accepted as a means of payment and has attracted criminal activity, financial regulators, and law enforcement agencies. Another example is *Internet memes*. An Internet meme is an activity, concept, catchphrase or piece of media text which is often used as mimicry. Internet memes play extensively on humor and satire of social issues and popular culture and are widely shared and diffused throughout the social media universe. Figure 3.2 shows two Internet memes of the cult actor Chuck Norris. The one on the left states: “There is no theory of evolution. Just a list of creatures Chuck Norris has allowed to live”, while the one on the right states; “Scared? When the Boogeyman goes to sleep every night he checks his closet for Chuck Norris”. *Hacktivism*, which combines hacker practices and forms of civil disobedience, is another social media practice. Hacktivism, which has roots in the hacker culture, is a type of emergent social organizing where politically motivated persons use a variety of social media software to raise political awareness around issues like free speech, human rights or freedom of information or to promote critical thinking. Here, the international network of activist and hacktivist entities Anonymous has been involved in many controversies. Another example are the mobile apps companies Uber and the lodging app Airbnb, which have challenged the taxi and hotel industries and the private rental market in countries worldwide; they have been labeled as belonging to the “*sharing economy*”.

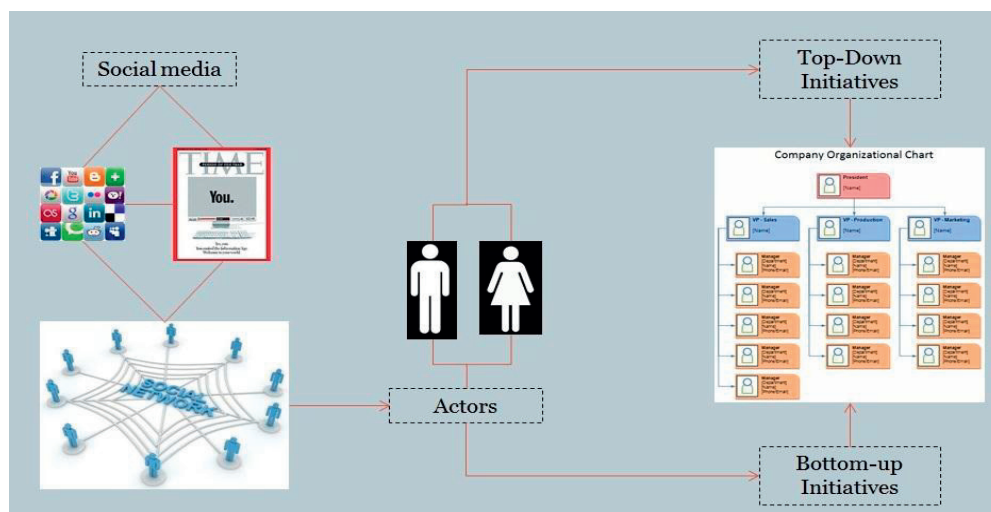
These mediated social media phenomena are hard to predict or control and are seldom under any “central command” issuing directives because they are strongly *user-driven* and shaped by the contributions of their users. Some have the potential to emerge into powerful arrangements and can contradict the position of established institutions, a factor that is valid when trespassing and challenging the established domains of particular industries or economies. But what happens and what types of understanding are socially constructed and enacted when local actors in organizations – in either first-line or top-management positions – decide to import, translate, introduce, and legitimize social media and create social media practices through initiatives they organize? In other words, what happens when the conditions and cultural logics of the social media universe linked to *society at large* are reshaped and translated *into organizational life* by various initiatives performed by actors in organizations?

Søyland and Herstad (2011) address this argument, contending that the established ways ICT researchers have approached the adoption and implementation of ICTs in organizations is up for review. Søyland and Herstad maintain that the adoption and implementation of ICTs into organizations are often time-consuming processes and go through top-down orientated trial-and-testing phases before being introduced to end-users. ICTs are subject to reviews by stakeholders and are managed in light of ongoing organizational priorities and are evaluated in light of decision-making processes that include matters of costs and strategies. Søyland and Herstad argue that in organizations the adoption and implementation of social media more commonly occurs more “under the radar”, as actors in front-line positions are increasingly “importing” them and making them part of their work practice. This can cause side-effects, as employees can set up other forms of organizing and use technologies in unexpected ways.

Adoption and implementation of social media “under the radar” therefore could challenge and rewrite the ways in which ICT tools are administrated in organizations. ICTs in organizations are also governed and subject to an institutional control regime that can define and set the premises for technology use and organizational activities and performances. This control

regime plays a crucial role in processes of adoption and implementation of new technologies and regulates the work practice of employees. In this regard, a common experience is the repeated pattern that adoption and implementation of ICTs can generate *unintended consequences*. Technology designers and implementers often observe that end-users can decide to use or enact ICTs in unexpected ways other than those planned or intended, a factor making processes of implementation of ICTs difficult to predict or control. Furthermore, technology users can be capable of constructing new emergent social structures, which are enacted and based on the use and interpretation of technologies and can become socially objectified and institutionalized by recursive human action, potentially producing social organizations. This factor has increased significance when social media end-users can organize their work practices on social media technologies other than the ICTs issued by the organization.

Figure 3.3 Bottom-up and top-down perspectives on social media.



These conditions suggest a need to use *decentralized* perspectives to grasp the adoption and implementation of social media into organizations. This means using different “research lenses” and putting greater emphasis on how the adoption of technologies can emerge from actor-motivated grassroots initiatives from inside organizations. This calls for applying *bottom-up* perspectives in addition to the usual *top-down* ones, as illustrated in Figure 3.3. A bottom-up perspective can be seen as an analytical procedure to piece together a larger form of organizing emerging from the local use of social media initiated by actors having a first-line position in an organization, while a top-down perspective can be used to follow the outcome of a top-management initiative by performing a stepwise design of breaking down the assumptions of an organizing to gain insight into the interpretation and expectations of its distinct compositional units. The relevance of these perspectives pertains when humans decide to *interpret* and *enact* their use and understanding of a technology in relation to established *social contexts*. This means that when actors in organizations “import” and start using social media and reshape user-generated content to fit their practice or context and ride the participatory culture of the Internet, technical definitions like “Web 2.0 + User-Generated Content”, as suggested by Kaplan and Haenlein (2010), lose analytical weight. The implications of how actors socially construct new genres and social organizations by their actions can be grasped better by paying attention to the importance of processes of contextualization and decontextualization.

To frame how social media makes its way into organizations by the bottom-up or top-down initiatives performed by actors, we can look to Røvik's (2007) work as a case in point. Over the years, Røvik has developed a framework exploring how *ideas* or "*recipes*" are translated and shape organizations. Røvik is interested in demonstrating what empirically when one attempts to translate ideas are into practices, and vice versa. To understand these aspects means to deal with the role of contextualization and decontextualization. Røvik has developed his own models of explanation, the "virus theory" and "translation theory", which capture different aspects of the proposition, transfer, reception, and utilization of organizational "recipes". These theories challenge the established "decoupling" argument in organization studies (DiMaggio & Powell 1983; 1991; Meyer & Rowan, 1977), which argues that organizational "recipes" or "rationalized myths" seldom materialize into practices, but remain wrapped as an idea on a discursive level. Røvik argues otherwise, as empirical evidence contradicts the established division between ideas and practice. Contextualization, which involves the translation of ideas to practice, demonstrates variety in how *receptive* organizations are to ideas. Decontextualization, which involves translation from practice to ideas, argues that ideas or recipes can be transferred between organizations, it merely depends on how digestible and well packaged they are to those who unpack and install them. This means that Røvik's (2007) "virus theory" can be of value to understand how social media is adopted and implemented into organizational life, which in my study means to focus on the role of contextualization. Moreover, one needs to cast light on which actors translate or import social media and its embedded ideas, the arenas in which this takes place, and the inscription rules that follow.

As an extension of Røvik's "contextualization" argument, my thesis establishes a research perspective that addresses the potential impact social media might have on organizational life. This is realized by establishing a user perspective which aims at showing a gradual adoption and implementation of social media from the point of view of an actor who interacts from inside an organization. This is empirically illustrated by examining the outcome and processes of a set of initiatives performed by people in selected organizations. These initiatives are analyzed by combining bottom-up and top-down perspectives. The initiatives show how humans translate, organize, construct, and enact local organizations around social media, which are based on their understanding, actions, and interpretations of social media and connected to the organizational context in which they interact. Characteristic of these initiatives is the way the actors "import" or implement social media and their embedded ideas onto the turf of an organization and initiate a form of activity or embed social media into an existing practice. From there, the actors form processes which can result in the social constituting of a successful or failed local organizing or social media practice. Common to all the organizations is that they are linked to social media and it would be much more of a challenge to realize them if the technology were absent. The realities of the local organizations become clearer – or perhaps acquire a "social life" – when they contradict organizational measures initiated by an organization. For analytical reasons, I refer to these local organizations as "models". I use the term as an analytical instrument to give an empirically founded and holistic framework to illustrate how actors use, interpret, and translate social media into their local organizational contexts by initiatives they orchestrate. Moreover, the model concept is used to describe the potential outcome and processes emerging from the social constituting of the actors' use and interpretation and recurring engagement with social media in organizational contexts. Finally, the models are used to create a solid user perspective on the use of social media and how humans interpret a single web technology into organizations. To further my "model" argument, I discuss this relation to concepts and research perspectives used in organization studies to understand the role of technologies in organizations and work processes.

3.2 Part II: The role of technologies in organization studies

Organization studies has a long track-record of studying the adoption and implementation of technologies into organizations and the ways different types of technologies can shape our understanding of the organizing of work, organizational structures, and organizations. Furthermore, organization researchers have tried to *theorize* the potential effects that the material properties of technologies can have on human behavior in organizational environments, such as theorizing emerging from empirical analysis and scholarly discussions. This has bred an extensive theoretical tradition, offering various views on the role of technologies in organizations.

From the 1950s to the 1970s, industrial sociologists pursued studies that tried to conceptualize the effects that different types of *production technologies* had on work, industrial structures, and organizational environments. Organization researchers examined small-scale enterprises and large organizations like steel plants, textile mills, and coalmines, and attempted to establish the connections between various types of production technologies and the organizing of work and industrial structures (Aldrich, 1972; Blau, Falbe, McKinley, & Tracy, 1976; Emery, 1959; Emery & Marek, 1962; Hickson, Pugh, & Pheysey, 1969; Pugh & Hickson, 1976; Trist & Bamforth, 1951). Woodward (1958, 1965), for example, studied a number of production technology companies in England in the 1950s. Woodward classified the companies according to what types of production technology they used, an analysis spawning a number of insights (Clegg et al., 2011). Woodward found that the more routinized the technology, the more the organization was likely to be hierarchy orientated and the more knowledge needed to operate the production technology was linked to organizational structures. Woodward established that small organizations with production technologies requiring low levels of specialization hired workers with *generalist skills*, while mass-production units required *technical specialists*. Small firms tended to have low levels of formalized bureaucracy and there was little difference between technically competent staff and managers, while large mass-production companies demonstrated the opposite tendency. The type of production technology influenced the business priorities of companies, as small production companies focused on *innovation* and mass-production firms on *efficiency*.

Trist and Bamforth (1951) tried to identify the *psychological effects on workers* caused by the introduction of new production technologies in a study of English coal miners in the late 1940s. Trist and Bamforth argued that different production technologies had contradictory effects on the well-being of the miners. Prior to the introduction of a new production technology, the miners were organized into small autonomous groups that shared the same work-cycles and relied on interpersonal ties, but these were dissolved and replaced with new routines. This led to other ways of organizing work in which the miners worked individually in shifts. The miners could no longer rely on the self-organized groups that had been important to them. When the miners had difficulties in meeting the production quota it caused negative effects on the work situation. When the miners could not meet the production demands, they turned to group defense mechanisms like finding scapegoats and relying on informal organizations, triggering coal production to plummet. Trist and Bamforth's work illustrated that implementing new production technologies involved change where workers had to answer to a new mechanistic organization that was more hierarchical and bureaucratic.

Although Woodward's work has been re-examined and criticized (Aldrich, 1972; Blau et al., 1976; Hickson et al., 1969; Pugh & Hickson, 1976), the empirical studies from this period produced valuable theoretical perspectives on the role of technologies in organization studies. The work of Woodward and contemporaries is seen as based on *contingency theory*. Clegg et

al. (2011) argue that contingency theory assumes that organizations have to deal with contingencies, like technology, because external conditions shape how organizations are designed and managed. Leonardi and Barley (2010) claim that contingency theorists had a strong *determinist* view on technology, implying a view that different production systems have the power to breed various forms of organizing and can somehow directly shape human behavior in organizations. The premise of this view relates to the capacity ascribed to technology by contingency theory, which Perrow saw “as an independent variable, and structure – the arrangements among people for getting work done – as a dependent variable” (1967:195). Leonardi and Barley (2010) suggest that the contingency theorists met contrasting views from the *socio-technical systems theorists*, which was exemplified by the research work of Trist and Bamforth (1951) and Emery (1959). This research stream assumed a *mutual* interaction between humans and technologies, rejecting the determinist vision held by the contingency theorists.

From the 1980s, organization researchers started to take an interest in the arrival of ICTs and especially examined why people respond differently to management information systems and computer science communities. Leonardi and Barley (2010) argue that ICTs have been approached from a *social constructionist* research perspective. This research tradition draws on sociological concepts introduced by Berger and Luckmann (1967), leading to new views on technology. The research focus is turned to *social* aspects and *processes* springing from the *use* and *interpretation* of technologies into organizational contexts. This research perspective suggests that humans’ interactions with technologies create concepts and mental representations, which can be constituted and institutionalized into reciprocal roles and played out by human action. This analysis emphasizes that knowledge arising from the rich variety of languages, symbols, and experiences, can emerge or is embedded in the use of technologies, involving focus on constructed understandings produced by humans. The “research umbrella” draws significantly on intellectual impulses from disciplines like sociology, social anthropology and social psychology. Organization theorists link their work to Science and Technology Studies (Bijker, Hughes, & Pinch, 1987; Callon, 1986; Latour, 1987; Pinch & Bijker, 1984), to Giddens’s (1984) structuration theory and to Bourdieu’s (1977, 1990) practice theory. The latter two have been significantly improved and adapted to frame the meaning of technologies in organizations. The social constructionist perspective shares similar ontology, but differs as researchers tend to combine approaches like social information processing theory, actor-network theory, symbolic interactionism, and critical theory.

This has implications for the views of technology. Orlikowski and Scott (2008) claim that technology understood as an independent and dependent variable diminishes in analytical value to be replaced by a focus on the dynamic interactions between people, organizations, and technology. Organization researchers adopt processual and contextual perspectives, which are driven by longitudinal research approaches, and argue that social interaction and outcome with technology are mutually dependent, integrative, and co-evolving. Leonardi and Barley (2010) emphasize rather that technology is not understood as a production technology *per se*. The social constructionist research tradition means a rejection of the determinist view on technology, involving a departure from contingency theory. This means that how researchers view the processes of adoption and implementation of new technologies in organizations changes too. Leonardi and Barley argue that social constructivist organization theorists are inclined to view organizational change as emerging out of an ongoing stream of social action in which people respond to the technology’s constraints and affordances. Moreover, researchers will put analytical focus on how interpretation, meaning, attitudes, and beliefs, can shape the use, adoption, and implementation of technologies into organizations. This means that the social

constructionist approach has narrowed down and studied the processes of adoption and implementation of technologies in established organizational contexts from several concrete perspectives. Leonardi and Barley conclude that organization researchers have examined the implementation process from phases of the process itself; the social phenomena being constructed in it; and the process by which the construction occurs. This brings forward analytical nuances in what takes place in adoption and implementation processes and what meanings the use of technology acquires from it.

Leonardi and Barley (2010) outline that the constructionist research tradition has conceptualized this by studying technologies from five distinct perspectives. These include perception, interpretation, appropriation, enactment, and alignment.⁶ The *perception perspective* focuses on the first phase of the implementation process, adoption, and tends to investigate why technology users share the same attitudes, beliefs, and values. This involves understanding how users ascribe meanings to new technologies, based on shared ideas that can manifest when technologies are implemented in organizations. This means measuring the social influence of technologies in organizational contexts. Perception is a commonly applied perspective which stresses the limits and affordances of technologies. This has spurred a wide range of influential studies, according to Leonardi and Barley (see, for example: Fulk, 1993; Griffith & Northcraft, 1996; Karahanna, Straub, & Chervany 1999; Kraut, Rice, Cool, & Fish, 1998; Rice, 1987; Rice & Aydin, 1991; Vishwanath, 2006; Yuan et al., 2005). The *interpretation perspective* investigates how humans interpret technologies, as it is orientated towards use and transference in implementation processes. Leonardi and Barley (2010) argue that studies emerging from this body of research will establish that users often approach technologies by drawing on previous frames, schemas, and experiences, like professional work practices, when they first use new technologies, which involves focusing on cognitive structures. This implies that users rarely meet new technologies without prior know-hows, with the consequence that users override initial designs and intentions (see for example: Barley, 1986; 1988; Gopal & Prasad, 2000; Hsiao, Wu, & Hou, 2008; Jian, 2007; Markus, 1994; Orlikowski & Gash, 1994; Prasad, 1993; Walsham, 2002). The *appropriation perspective* has a post-intention agenda in implementation process, according to Leonardi and Barley (2010). This research perspective is also interested in understanding how people use technology, but researchers are more prone to examining the extent to which technology users follow or deviate from the designs or intentions behind a technology after it has been introduced into an organizational context. Appropriation perspectives stress that technologies are biased, implying that there is intent behind why they are implemented in organizations (DeSanctis & Poole, 1992; Orlikowski & Robey, 1991; Watson, DeSanctis, & Poole, 1988). *Enactment perspectives* are interested in establishing how people use technologies, according to Leonardi and Barley (2010). But enactment perspectives are motivated by creating a practice lens and examine the evolution of work practices rather than cognitions or norms. “Enactment researchers” will argue that social construction emerges when people start using a technology and integrate it into their everyday work, meaning that social construction transpires from pragmatic action and situated improvisations. This means that technologies can generate social organizations embedded in technology and can influence organizational designs (Barley, 1986; 1988; Boczkowski, 2004; Boudreau & Robey, 2005; Constantinides & Barrett, 2006; Dery, Hall, & Wailes, 2006; Orlikowski, 2000; 1994; 1995; Vaast & Walsham, 2005; Volkoff, Strong, & Elmes, 2007; Yates & Orlikowski, 1992). The *alignment perspective* is interested in understanding how organizational structures adapt to the introduction of new technologies in organizations and view technology adoption from a new-institutional framework, according to Leonardi and Barley (2010). Such studies tend to investigate the extent to which existing organizational

⁶ These perspectives are rendered as outlined by Leonardi and Barley (2010).

structures in organizations sculpt around new technologies and how they can rearrange the social organization within it. These perspectives would question how power balance and hierarchical structures are linked to the adoption of technologies, and what impact they potentially have on roles and relationships and work processes (Barley, 1986; Black, Carlile, & Nelson, 2004; Davidson & Chismar, 2007; Edmondson, Bohmer, & Pisano, 2001; Leonardi, 2007; Schultze & Orlikowski, 2004; Zuboff, 1988).

Recently, the theorizing on the meaning of technology in the management literature has progressed into a scholarly debate revolving around a demanding concept, *sociomateriality*, which has meant crossing over to Actor Network Theory (ANT) for analytical inspiration (Callon, 1986; Latour, 1987). This work has been led by Orlikowski (2007, 2010; Orlikowski & Scott, 2008). Orlikowski, who expands on theoretical concepts developed by Latour (2004; 2005) and Barad (2003; 2007), has been particularly interested in acknowledging a theoretical assertion made in the ANT literature – that “technological artifacts are considered as equivalent participants in a network of human and non-human agencies that (temporarily) align to achieve particular effects” (Orlikowski & Scott, 2008:456). This implies a new research agenda in organization studies and an argument that the longstanding opposition between the “technical” and “social” should be abandoned and replaced and fused under the single concept of sociomateriality. Central to Orlikowski’s claim is to readdress the idea that the technological and social should not be studied as mutually *separate* phenomena that can *influence* each other – which has been the dominant way to understand technologies – but to “move away from focusing on how technologies influence humans, to examining how materiality is intrinsic to everyday activities and relations” (Orlikowski & Scott, 2008:455). Orlikowski’s project is to challenge the fundamental ontological assumption made on the distinction between the technological and the social. Orlikowski argues that previous understandings have been framed around an “*ontology of separateness*” (Suchman, 2007), which has meant that researchers have theorized on the basis that the technological and social are *separate* entities and realities. This should be reversed. We should see them as linked, equal and inseparable, which addresses the importance of “*relational ontology*”. Instead of viewing the technological and social as separate at the start of an analysis, for example, one should treat technological artifacts “symmetrically to the humans, and as equivalent participants in a network of humans and non-humans that (temporarily) align to achieve particular effects” (Orlikowski, 2010:135).

But the question remains, how does one apply sociomateriality in any data analysis and relate it to a field situation? In this regard, Orlikowski (2010) claims that organization researchers should pay attention to *performance* and to the *enacting* of particular meanings and materialities manifesting as part of everyday practices in organizational life. I interpret this argument to suggest the need to develop a more refined practice perspective based upon ideas seen in social phenomenology, which Orlikowski calls “entanglement in practice”. Orlikowski, who again turns to Barad (2003), argues that embedded in the concept of sociomateriality is a recognition that relations and boundaries between humans and technologies are not pre-given or fixed, but enacted in practice. This appears to suggest that when studying the boundless relational constituting and discursive materiality of some particular sorts that can make up a phenomenon, it is through the research knowledge coming from describing a dynamic sociomaterial configuration that a researcher uses “sociomateriality-in-practice”.

On the other hand, Orlikowski’s sociomateriality has not passed into the management literature without critique from peers. Leonardi (2013), who regards sociomateriality as a theoretical development of Giddens’s (1984) structuration theory and maintains that its ontological foundation is rooted in agential realism, has identified shortcomings with Orlikowski’s ontological project. For example, sociomateriality is criticized for being “over-social”, meaning

that the “technological” and “materiality” have been marginalized and made peripheral from research analysis, as one reads mostly about “norms governing when, why, and how to use a technology in a specific setting” (Leonardi, 2013:64). Other organization theorists are strongly critical of sociomateriality. Mutch (2013) identifies several limitations with sociomateriality: it lacks a unique explanatory power as other models of explanation can give similar insights; it is challenging to apply and integrate into empirical analysis, as researchers admit that they have difficulties in following the material; it ignores time; and as a practice perspective it is not suitable as a theory of constitution as it reduces considerations of structure and institution. These theoretical shortcomings lead Mutch to conclude that organization theorists should develop other ontological stands on sociomateriality, which Mutch and Leonardi find in *critical realism*. Leonardi outlines this argument in greater detail and, in short, essentially develops a framework that can rewrite the “material” or the “technological” back into our understanding of technology. Leonardi’s approach is to challenge “the problem with treating all relationships as mutually constitutive” (2013:67). Although critical realism and agential realism share the same ontology, Leonardi contends that they differ on the *interpretation* of reality, as critical realism assumes the existence of *multiple* realities that can operate interchangeably and independently of each other. The premise for sociomateriality’s ontology, agential realism, is not multiple, but encased in a single entity. Leonardi argues that this nuance has importance for the understanding of sociomateriality. A *critical realist* approach will therefore accept that the social and the material are *separate* entities that “are put into relationship with one another and come to appear inseparable through human activity occurring over time” (Leonardi, 2013:69). This allows critical realists to address the material properties created by human action independently of the social, which proponents of agential realism cannot do. Leonardi maintains that this is possible because critical realists now acknowledge that the social and the material are *external* relations rather than *internal* relations standing in a dependent relationship to each other, meaning that “critical realists can talk about a technology’s ‘materiality’ while agential realists cannot” (Leonardi, 2013:69). This analytical move involves rewriting the material or the technological back into our understanding of sociomateriality. Moreover, this opens up for new ways to theorize on the capabilities of materiality, when linked to human action and agency, as the material is now somehow allowed to be conceptualized beyond the boundaries of human ideas of reality.

Although Leonardi stresses that the material is a product of human activity, meaning that it is to be linked to the social, the critical realist critique is motivated by pinpointing challenges with sociomateriality. This deals with acknowledging that materiality can exist independent of people, for example, but the critique seems to concentrate on the limitations of a practice perspective on technologies as a premise for conceptualizing the organizing of work and the organization itself. Too much focus on sociomaterial practices as an ongoing activity omits the notion of time. Leonardi argues that the main challenge with sociomateriality is:

that it becomes difficult for the analyst to understand what role the sociomaterial plays in the constitution and perpetuation of organizations. By introducing time and by focusing on the process of the imbrication of agencies through it, the critical realist perspective provides better explanation of organizing as a process (rather than simply action) and, consequently, more points of articulation with extant theories of organization. (Leonardi, 2013:71)

3.2.1 Framing a research lens to analyze social media *in* organizations

Organization science, therefore, has a 60-year research tradition of studying and theorizing the processes of adoption and implementation of technologies in organizations. The history of the research tradition shows that organization scholars have produced different analyses of how ICTs are embedded in such processes. And with that, organization theorists have composed a

large variety of specific and detailed analytical concepts that have emerged as a consequence of empirical analysis and scholarly debate. With the arrival of social media onto the turf of organizations, younger generations of organization scholars have developed new research agendas with new theoretical lenses. Since 2010, a growing body of organization research has advocated for an *affordance lens* to understand the role that social media plays in organizations (Majchrzak, Faraj, Kane, & Azad, 2013; Treem & Leonardi, 2012). The affordance lens expands on ideas introduced by the psychologist Gibson (1986). Central to Gibson's claim was that objects could be used in various ways and be perceived as beneficial to perform particular activities without paying attention to what an object "is", an observation that led Gibson to claim that individuals do not perceive what the object "is" but what it can afford. Gibson called this perception of an object's utility an *affordance*. This assertion brings the critical realist argument closer to the foreground, meaning that an object can exist outside the realm of human reality and come to "life" when an individual interacts with its features and ascribes meaning to it. The materiality of an object is ascribed a life of its "own" and is activated when people come into contact with it, while the affordance does not. This is connected to the fact that when humans interact with materiality they can have various goals and see a technology differently; some will see technology as an obstacle and others as an enabler of some sort. The affordance lens on social media in organizations involves putting greater focus on the action potential and capabilities that can be taken given a technology and how this can be linked to processes in organizations. Treem and Leonardi (2012) develop an affordance perspective and theorize that social media enables four affordances: *visibility*, *persistence*, *editability*, and *association*. Majchrzak et al. (2013), who expand on Treem and Leonardi, argue for four affordances of social media: *metavoicing*, *triggered attending*, *network-informed associating*, and *generative role-taking*, which represent different ways to engage in visible knowledge conversations in organization by use of social media.

In light of the outlined discussion, how future organization science students will choose and use theory to understand their own work is a relatively open matter they have to decide for themselves. In this regard, I adopt a different path to understand the arrival of social media in organizations, which is essential to understand the logics behind the dissertation's four models. I construct a research lens that predominantly expands and combines analytical concepts developed within what Leonardi and Barley (2010) call *interpretation* and *enactment* perspectives on technology in organizations. On the one hand, I draw on research perspectives that try to show how humans *interpret* social media by drawing on previous frames, schemas, and experiences when using a technology, which involves putting the focus on emerging cognitive structures when people use the technologies in organizational contexts. On the other hand, I am motivated by applying a *practice lens* to examine how humans use social media and understand the evolution of practices emerging from its use, meaning that an actor's actions and situations play a crucial role in the forthcoming data analysis. This means that my analysis is concentrated around four "theoretical pillars": *interpretation*, *cognition*, *practice*, and *situations* associated with the use of social media in organizations.

Therefore, my *general views* on technologies or social media in organizations are inspired by concepts discussed by Weick, who is credited with devising the "sensemaking" framework. According to Weick, "reality is an ongoing accomplishment that emerges from efforts to create order and retrospective sense of what occurs", and this is what he terms "sensemaking" (Weick, 1993a:635). Essential to Weick's approach is that sensemaking is about *interpreting* encounters from the *social situations* humans meet through *social interaction*. Weick also discussed ways to conceptualize the role of technologies. Weick (2001) suggested that when technologies enter organizations they tend to take on roles that are *ambiguous* or *equivocal*. Technologies are

“undefined” and require ongoing structuring and sensemaking if they are to be managed into organizational life. But in light of the fact that new technologies enter organizations – involving a move from production technologies to ICTs – organization theorists are challenged as the properties of new technologies rearrange how we conceptualize them. New technologies have changed from *static* to *abstract*, as they now tend to “be immersed into the technology”, as Weick puts it. Weick argued that new technologies have three properties; they are stochastic, continuous, and part of abstract events. These conditions require the use of other approaches, like paying attention to the structuration, affect, and interactive complexity of the technology, and the premise of control. To manage the ambiguity of new technologies Weick implied that humans had to rely more on interpretation or retrospection and construct *scripts* around the technology they intend to use. Scripts, which can be seen as *meanings* or *cognitive models* or assumptions about a technology’s apparatus created by interpretation, manifest in symbols and expressions embedded in the technology and emerge from social processes. In some sense, scripting cognitive models around technologies based on human interpretation could be ever more important for humans to master and use in practice. Perhaps we have become more dependent on them when deciding to use new technologies in organizational contexts.

Although Weick outlined his arguments in a different era, I believe his observations are still valid about the role of social media today. Weick’s arguments surface as relevant when social media is adopted and implemented into organizations – or in society at large for that matter. Social media tends often to be *equivocal* or *ambiguous*, as it is more common that humans interact with it in situations characterized by media richness and abstract technology environments. Social media are *no less* abstract than ordinary ICTs and have to be managed by acts of sensemaking, where among other things users rely more on interpretation, enactment, and retrospection to figure out what it “is” and how it “works”. This means that my views on social media align with current theoretical debates in organization theory – that we still have to engage with ontologies. Moreover, I suggest that organization researchers can engage in the construction and outcomes of the interpretation and scripting processes emerging from the recurring enactment with social media and show how humans manage and organize themselves in relation to that. As an extension of this argument, I suggest that organization researchers can start developing and empirically using *model-based technology approaches* which emphasize the strategies and choices humans use to manage and organize the processes and outcomes of recurrent engagement with a technology that manifests as equivocal. I suggest that organization theorists could view this from an *actor perspective* or from the perspective of those who use the technology as part of everyday life. Such a perspective was, for example, developed early on by the social anthropologist Barth (1966), who argued for what he called “models of social organization”, which was also a theoretical approach for studying all social life. In short, Barth’s claim was to outline what he called *generative process analysis* or *process analysis*, which held that a holistic understanding of a society could be achieved by analyzing the sum of the aggregated results of individuals’ decisions and choices. Barth, who was inspired by Goffman (1959) and was in turn an inspirational source for Giddens’s (1984) structuration theory (Eriksen, 2015), created a rather formalistic view on social life by combining elements from game theory and social constructionism. Barth contended for putting focus on social interaction and following the patterns emerging from choices and decisions performed by humans by describing social transactions and values. By making detailed empirical analysis of *regularities* emerging from social interaction this could generate a social form or constitute one or several interlinked models or forms. Barth suggested that these social forms could generate other social forms, which could explain and understand how social change took place in societies, theoretical ideas Barth used to explore a variety of human cultural activities in his later works.

The shortcoming with Barth's approach is the absence of addressing technology. To illustrate a better way to use model-based technology approaches, this can be exemplified by looking at Groth's work. Groth (1999) made a link between the human capacity to organize and coordinate activities and the role of ICTs in organizations, which Groth argued could create new organizational designs. Groth, who expanded on Mintzberg's (1983) five organizational configurations – simple structure, machine bureaucracy, professional bureaucracy, diversified form, and adhocracy – claimed that when organizations grow to a certain size and become difficult to manage, humans tend to *specialize*, which calls for sophisticated approaches on how to improve administration. Specialization means division of new tasks and new ways to perform hierarchical supervisions, involving the birth of new concepts of coordination and organizational configurations. Groth exemplified this by showing that the Machine Bureaucracy of the Industrial Age was more effective to coordinate tasks than were the simple structures from archaic societies. This implies that distinct organizations are an integrated part of their empirical contexts and dependent upon the technologies of their time. *Production technologies* in the Industrial Age were intimately connected to the organizational configuration of the hierarchical order of the *Machine Bureaucracy*. But when humans specialize and invent new technologies this can lead to what Groth calls "the space of constructible organizations". With the arrival of ICT, the link between human coordination and ICT can produce new organizational designs, which Groth called *model-driven organizations*. To exemplify this, Groth used the coordinating power of the *database* as a case. The database outperforms humans as it can process vast amounts of information outside the human mind, in addition to allowing humans to communicate, automate, and process in new ways. Groth used as an example the airline reservation systems introduced in the 1990s, which allowed travel agents and airline personnel to log on and carry out quick bookings without talking to each other, showing how the database inaugurated the age of hyperautomation. Such conditions imply that when organizations increasingly use multiple databases and integrate them into the organizing of work, it means embedding new logics of automation and expanding the space of constructible organizations. This entails a new territory for organizational thinking too. Groth argues that when organizations develop and adopt overlapping databases they will become more complex, implying that in order for them to be fully harmonized with an organization's design one needs *conceptual tools* to give them meaning. In fact, one can argue that humans will become dependent on them, implying that the *creative art of modeling will arise as a crucial future competence*. This rests on the assumption that at some point in time there will be a *separation* between the organizational design on which the technology is based and the active organizing logic that drives the technology itself. This separation will cause ICTs to become too *abstract* and *complex* for humans to manage and relate to. Thus we will need other organizational configurations when databases are essential components to coordinate tasks, resulting in one of several model-based organizational designs that Groth called the *Organized Cloud* – which is not far from being an accurate description of what social media is today.

Therefore, we can now return to addressing the four models and link them to the specific theoretical concepts I use to develop them further. These are listed in Table 3.1. I also stress that the larger theoretical outline for each specific theoretical concept or perspective will be an integrated part of the data analysis for each chapter.

Table 3.1 Overview of actors, organizations, local models, and concepts.

No.	Actor	Model	Pseudonym	Organization	Context	Perspective	Year	Concepts	Authors
1.	Students	Shadow Student Learning Ecology	The Alfa Organization	High school	K-12 Education System	Bottom-up	2012	Learning Ecology Connectivism	Barron (2006) Siemens (2005)
2.	Teacher	Authentic Learning Situation					2011-12	Technologies-in-practice Reflection-in-action Reflection-on-action	Orlikowski (2000) Schön (1983)
3.	Beta Group	Relation Platforms	The Echo Organization	City Municipality	Public Administration	Top-down	2008-12	Genre repertoire Reflection-in-action Reflection-on-action	Orlikowski and Yates (1994) Schön (1983)
4.	Employees	2.0 Social Intranet Portal	The Lima Organization	County Authority			2014	Technological frames Ethnic group of Boundaries	Orlikowski and Gash (1994) Barth (1969)

Model 1: The Shadow Student Learning Ecology

The first model, the *shadow student learning ecology*, examines an actor perspective on how social media is socially constituted and embedded into an *educational context* by actions and initiatives carried out by learners. I analyze and try to demonstrate the dynamics of the model in light of specific concepts developed within educational research, which has explored the relationships between learning and technology. I use and combine parts of Barron's (2006) *learning ecology perspective* with aspects of Siemens's (2005) learning theory for the digital era, *connectivism*. In short, the learning ecology perspective claims that adolescents can influence and play a part in their own learning progression and use this as part of interdependent contexts in which they interact, while connectivism can be seen as an attempt to make learning theory by combining elements from the network society research trajectory, which I examined earlier in the chapter. These theoretical concepts are used to develop a solid learner perspective on use of social media in an organizational context. My interest is to frame how students use social media to organize learning activities and I pay attention to what type of knowledge acquisition strategies they perform in that regard.

This is empirically contextualized by analyzing social media's "uncontrolled merging" onto the turf of a high school, which contradicts an educational measure aimed at boosting the digital competence of high school students. Since the 2000s, Norwegian high school students and teachers have been equipped with laptops with direct access to the Internet. The laptops are intended to follow the students throughout their studies. But teachers soon experience that these measures do not meet with the expected outcomes. Teachers see that students socialize and use the leisure activities offered by the social media universe, which often takes place *in* the classroom. These student practices cause disputes over the intention of having technology condensed learning environments. Teachers respond by arguing that the students' social media activities are distractions, claiming that they result in obstructing the formal learning the teachers attempt to initiate. This means that students' social media uses are evaluated as

contradictory with educational views on technology and learning. And to regain control, many high schools with laptop initiatives attempt to sanction students' user practices by installing filters on social media software.

To show a hitherto unmapped side of this situation, the *shadow student learning ecology* takes us to a high school with a laptop initiative that also implemented a *technical* filter preventing student use of Facebook, a high school I call the Alfa Organization. Here, I use a bottom-up perspective to portray how a group of high school students take the initiative and use social media to organize their formal and informal learning activities. The students were in either their first year or last year at the high school and comprise the study's "Actor number 1"; their experiences are told through what I call *the student case story*. The student case story describes how the students take the initiative to create and administer Facebook groups, which are used to fulfill learning activities. The students post practical information on homework and share cram sheets on them, or use them as discussion forums as part of school projects. The students use Skype as a means to con their homework, but they also co-write school assignments in Google Docs. The students also use YouTube tutorials for informal learning activities, to maintain and develop their hobbies, like learning to play a musical instrument, to play games and to improve their skills in photography. The outcome from the ways the students use social media to organize formal and informal learning activities emerges holistically into a local form of organizing resembling an autonomous learning ecology that is an off-limits site for teachers – one that is organized in "the shadows" of a learning institution.

The model of the Shadow Student Learning Ecology is explored in **Chapter 4**.

Model 2: Authentic Learning Situations

The second model, *authentic learning situations*, also takes an actor perspective on the ways social media socially constitutes and embeds into an *educational context*. But here the research perspective is swapped with an *educator's* use and crosses over to a more established theoretical framework in organization studies used to analyze the role of technologies in organizational life. I apply Orlikowski's (2000) *practice lens* or *technology-in-practice* combined with Schön's (1983) *reflection-on-action*. These two approaches are related and I suggest the concept "*reflective-technology-in-practice*". The intention is to explore the meaning and role of *retrospection* and *enacting* of social media in organizational contexts. Moreover, my ambition is to examine the various steps in a structuration process where a *proficient user* of social media – an early adopter, if you like – organizes a work process around a variety of social media software and practices. This means that I explore how an actor "imports" social media onto the turf of an organization, constructs a learning design, implements it, and uses personal reflection on completed activities to establish what become routines or recursive patterns in a long-term learning process in a classroom situation.

This is contextualized through what I call *the teacher case story*, which is also set in the high school called the Alfa Organization. Here, I use a bottom-up perspective to track the teaching practices of a female, digitally literate teacher working part-time at the same high school. The teacher is the study's "Actor number 2". The case story narrates the teacher's learning design for working professionally with social media in education, which she called *authentic learning situations*. This is a more personalized case story about the pros and cons of using social media in education. During the school year 2011/12, the teacher taught two classes twice a week, a vocational class in English and a Spanish class in academic studies. The teacher aimed at creating curriculum-based classes organized around the use of social media, implying an attempt to *decouple* from a print technology that has defined the identity of the teaching

profession for decades, the textbook. This involved motivating students to learn a foreign language by using social relations and information derived from the World Wide Web as a source of knowledge and by regularly working with social media software. This initiative contradicts a common teaching practice among teachers, but aligns with an educational goal of enhancing digital competence set by educational authorities. The case story has a focus on *structure* and *process*. I map the strategies behind the teacher's learning design and I try to capture the *implementation* and *enacting* of the model and establish recursive patterns from her actions, involving focus on *results*, *experiences*, and the *adjustments* the teacher had to perform when implementing her learning design. To illustrate this, I track the monthly progression of her classes, from August 2011 to March 2012.

The model of Authentic Learning Situations is explored in **Chapter 5**.

Model 3: Relation Platforms

The third model, *relation platforms*, moves on to a new organizational context. I analyze how social media is used and interpreted in a *public administration*. I use a research perspective from organization studies to understand the role of technologies in organizations, but with a minor difference. I combine analytical concepts used to explore the meaning of organizational communication and reflective practice among professional practitioners. Here, I bring together Orlikowski and Yates's (1994) *genre repertoire* with Schön's (1983) *reflection-on-action*. These concepts are used to investigate how an actor constructs a range of communicative practices. These are based on rearranging core web texts or features from social media and contemporary Internet culture and are adapted to the institutional governing logics of a post-modern bureaucracy. The concepts are applied to examine how a group of professional communication specialists uses personal reflection on actions and practices to *create* and *structure* the communicative practices fitted for using social media professionally in an organizational context. In this sense, the case story has similarities to the teacher case story, as I explore the work practices of another group of *proficient users* of social media. This means that my ambition here also is to explore what role *retrospection* and *enacting* of social media play in an organizational context. But the perspective differs, as the data analysis focuses on practices and activities contributing to the *outcome* of a long-term knowledge production process. I analyze how an actor "imports" a variety of social media software onto the turf of an organization, rigorously tests and evaluates them, and uses reflection to construct specialized knowledge around social media, which is performed in relation to ongoing institutional practices and logics in the organization where they work.

This is contextualized through what I call the *beta group case story*. The case story examines how a loose cluster of municipal employees took the initiative to form a social media competence group, a *beta*, which is called the Beta Group (BG, a pseudonym). The municipal employees work in a city municipality, which I have called the Echo Organization. The BG is the study's "Actor number 3". I use a bottom-up perspective to analyze the work practices of the BG. I establish a process approach and track the history and activities carried out by the BG from the fall of 2008 to spring of 2012, illustrating how employees in organizations work professionally with social media and build specialized knowledge around it. During this period, the BG began engaging with social media platforms, which they systematically reviewed and tested internally in the city municipality. These activities contributed to the creation of their own definition of social media, which they called "relation platforms based on user-generated content". The BG members authored the municipal guidelines for use of social media fitted to organizational use. The definition and guidelines are the result of self-initiated research, experimentation, and reflection on their own practice and use of social media, forming a

knowledge production process that has been subject to changes as the group interacted with ongoing municipal priorities, goals, and activities in the organization where they work. The definition and guidelines consist of adopted symbols and expressions from contemporary web culture and are part of a genre repertoire on how employees can use and embed social media into their work practices, forming an organizational literacy on social media. The case story examines events and conditions that have played a role in the knowledge production process leading to their self-created definition of social media.

The model of Relation Platforms is explored in **Chapter 6**.

Model 4: 2.0 Social Intranet Portal

The fourth model, *the 2.0 social intranet portal*, also considers how social media is used and interpreted in a public administration. I am here interested in exploring how specific *ideas* about social media are socially constituted and embedded into organizational life. To analyze this aspect I use research perspectives in organization studies that have examined what role interpretations play when humans decide to use or adopt new technologies. This is combined with theoretical concepts on the meaning of boundaries. I combine Orlikowski and Gash's (1994) *technological frames* with Barth's (1969) concept of *ethnic groups and boundaries*. This means that the research lens moves over to consider what role *interpretation* and *cognitive structures* play when humans decide to use new technologies that are implemented into organizational life, involving concentration on what previous frames, schemas, and human experiences take on in that regard. Moreover, I am particularly interested in establishing what role the negotiation of boundaries takes on and how humans use this aspect as a personal means to define their role performance. In this sense, the case story examines a classic problem complex analyzed in IT studies – that end-users can use technologies in unexpected ways, other than those the technology designers originally intended them for.

This is contextualized in light of what I call the *social intranet case story*. The case story investigates the decision of top management in a public administration, a County Authority (CA), which is called the Lima Organization, to implement a new intranet. This consisted of upgrading its older intranet and turning it into a social intranet by embedding a variety of technical features enabling information sharing, modeling it to be similar to an internal professional SNS. This was acquired through a public procurement and was organized as part of an internal project. The objective was to improve internal communications, simplify employees' work surface, escape e-mail burden, and contribute to bridging gaps across internal organizational boundaries, as part of a goal to bring organizational change and development. Also central, however, was the promotion of an organizational discourse stressing the importance of *sharing* content on the new social intranet and legitimizing a *sharing culture*. This implied that employees needed to be encouraged to change their communication and work practices by transferring private work interaction from e-mail increasingly to share work and to communicate on the social intranet. Although technical implementation went well, it later transpired that sharing was not taking place at the expected level, as employees were reluctant to engage in it. To analyze an aspect of this situation, the case story tracks how the initiative is interpreted and what meaning sharing and sharing culture acquire, by using a top-down perspective. The case story attempts to show how embedded ideas about social media socially constitute and translate into an organizational context. This is illustrated by analyzing the user experiences of a group of employees holding different positions in the Lima Organization. The employees are the study's "Actor number 4". The case story pays attention to their different involvement in the implementation of the social intranet and how they negotiate boundaries and

define their role performance. I am interested to how the employees interpret the social intranet and the meaning of sharing and how they relate that to their use of the social intranet.

The model of the 2.0 Social Intranet Portal is explored in **Chapter 7**.

3.3 Part III: The relevant research horizon on social media

This part of the chapter outlines the relevant research horizon. I provide a summary of current *research results* or *empirical findings* on use of social media in organizational contexts. The first subsection describes research produced by organization researchers on how social media is used in organizations. The second subsection looks at how educational researchers have examined the same technology in education systems for learning purposes.

3.3.1 Relevant research horizon on social media in organization studies

Organization researchers link the introduction of social media in organizations to the concept of Enterprise 2.0 (McAfee, 2009), often understanding it as a successor to the knowledge management research stream (Davenport, 2008). The role of social media in organizations has been analyzed from qualitative and quantitative approaches and from short-term and longitudinal perspectives. Researchers have focused on blogs, wikis, SNSs, bookmarking and tagging services. Leonardi et al. (2013) claim that social media makes its way into organizations in three ways, mainly as a platform to perform external and internal communication. First, it is common for organizations to adopt SNSs like Facebook, Twitter, and Google+ to communicate with other organizations and clients, an adoption that centers on carrying out diverse public relations strategies. This practice involves managing social media as *public sites*, in a similar manner to the way corporations handle ordinary web pages. Second, social media is adopted through organizational grassroots initiatives, a practice that Leonardi et al. refer to as *private implementation*. Employees download and install Open Source software or rent cloud-based solutions and create internal organizational communities around blogs, SNSs or wikis. Third, large research-based IT companies like Hewlett Packard (HP), IBM, and Microsoft have built and developed social media systems for internal use which have been researched and tested on their employees, a practice Leonardi et al. call *proprietary* custom-made social media systems fitted for organizational uses.

Studies of blogs in organization studies

Looking at particular social media applications, we find a body of studies that have examined *blogs*. Organization researchers argue that organizational blogging differs from normal blogging as distinctions between “external corporate blogging” and “internal corporate blogging” surface, implying that one is contending with new communicative genres operating under different conditions that set the premises for new use and design. Barros (2014) demonstrated this aspect in an impressive study on how the Brazilian state-owned oil company, Petrobras, strategically set up an external corporate blog that aimed at challenging the credibility and legitimacy of the Brazilian press, as the company argued that it received unfair press coverage on an alleged tax fraud incident. Besides such work, there are studies that have explored how blogs are used internally in organizations. Researchers have tended to investigate user adoption of the self-built blog systems or communities developed by large IT organizations like HP, IBM, and Microsoft. These companies give their blog systems names, like BlogCentral, BlogMuse and WaterCooler. For example, Huh et al. (2007) showed that IBM’s internal blog community BlogCentral could have positive effects on the work process of employees, leading the researchers to conclude that blogging contributed to collaboration

across a range of communities within the company. Huh et al. also found that users reported that blogs worked as a medium to collaborate and give feedback, a place where one could share knowledge, a site to find tacit knowledge and to connect with weak and strong ties, and was a repository for gathering external knowledge. Similar findings have been confirmed in other studies (Baehr & Alex-Brown, 2010; Jackson, Yates, & Orlikowski, 2007; Mariano, 2010). Brzozowski et al. (2009) studied the potential impact of managers' and coworkers' blogging practices on the behavior of employees who used HP's internal blog community WaterCooler. Brzozowski et al. found that feedback in the form of posted comments correlated with individual users' subsequent participation, leading the researchers to conclude that if managers start blogging this can motivate coworkers to do the same. Brzozowski (2009) showed that use of HP's WaterCooler changed employees' perceptions of their workplace, as use of the blog community enabled employees to locate the competence of coworkers and connect with peers outside their own business groups.

We find other studies measuring a set of recurrent themes, like why employees start blogging, the benefits of using blogs, barriers to adoption, and findings on initial user patterns. Research has shown that employees start blogging out of curiosity and with an expectation to get something in return (Jackson et al., 2007). Efimova (2004) mapped early on how blogs could be used by knowledge workers to boost personal competence. Efimova showed that knowledge workers wrote and read professional blogs to learn, to find ideas, to get feedback from peers, to capture and organize ideas, to connect with new people, and to find experts from professional disciplines. Efimova and Grudin (2007) explored similar aspects in a later study of blog use in Microsoft. They found that internal blogging positioned itself between personal and organizational interests, leading them to conclude that blogging could influence organizational relationships. Efimova and Grudin categorized blogging to have work-related uses, comprising of three types: (1) sharing passion for work and direct communication with peers; (2) showing a human side of an organization; and (3) documenting and organizing work. Studies have scrutinized user participation against demographic variables like age and gender. Wattal et al. (2009) observed that the older generation of employees, known as "Gen X" (born between 1965 and 1980), adopted corporate blogging faster than younger generations. This is contradictory to common assumptions on who adopts blogging.

Research has illustrated that implementing blogging in organizations is challenging. Baxter et al. (2011) showed that to overcome low user engagement among employees, it is necessary to inform and educate staff on how blogs can be used for work purposes. Agerdal-Hjermand (2012) explored how internal organizational bloggers tried to communicate knowledge across departmental boundaries, but felt disempowered and instead created their own sub-groups where they communicated with each other. In a later study, Agerdal-Hjermand (2014) examined how employees take on various roles and positions, user patterns interpreted as undermining the flow of internal communications. Yardi et al. (2009) demonstrated that blog contributors had unclear ideas of how many responded to blog posts or the size of their audience. Instead, this study identified that bloggers see blogging as a form of investment with expected returns in comments on their blogs, but experienced a mismatch, as they repeatedly commented on other people's blogs but found that no one commented back. Jackson et al. (2007) found diversity in which workers evaluated blogging as capable of bringing benefits. They found that heavy bloggers comment more on blogs they visit than their own and that some user segments particularly contribute and sustain blog communities. It is not surprising to find that a small core group of heavy users does this and experiences benefits. Jackson et al. also identified barriers to adopting blogging arising from lack of time, readership, or interesting material relevant to business goals.

Studies of SNSs in organization studies

The role of *Social Network Sites* in organizations has gained the attention of organization researchers. Some of the same facets identified in research on internal blog communities cross into the SNS landscape. Researchers are ready to claim that organizational use of SNS is different from ordinary online behavior seen on Facebook and Twitter, implying that organizational use of SNSs changes when framed against new contexts and is often appropriated for work purposes. Not surprisingly, many studies report that employees in organizations engage in professional SNS to find new social ties and bond with existing ones. In an early study, for example, Richter and Riemer (2009) mapped motives for professional SNS use among employees in three companies. Richter and Riemer showed that employees used SNSs to: (1) find people with the right competence or expertise who could help them with matters they worked on; (2) build personal and professional networks with people with similar backgrounds; (3) and foster and maintain existing relationships with professional ties.

Again, a number of research papers have investigated user adoption and implementation of SNS systems developed by IT organizations, especially Beehive, an organizational SNS designed and developed by IBM. Beehive has been subject to considerable and groundbreaking research and reports successes (Lin et al., 2012). Beehive has been rolled out and tested on IBM's employees and measured in various ways by researchers. Steinfield et al. (2009) studied Beehive from a social capital perspective. They claim that use of Beehive contributed to increased social capital among employees, implying that an employee's SNS engagement has unexpected benefits and serves organizational life in positive ways. Steinfield et al. found that coworkers maintain relationships with established ties and tend to expand on them. Employees used Beehive to bond with colleagues and to find expertise related to their area of interests, leading researchers to conclude that "light" SNS use contributes to reduce internal organizational barriers. Researchers have examined the ways IBM's global workforce perform connecting strategies too. Thom-Santelli et al. (2010) found that when an employee initiates contact with a colleague, this is often reciprocated. They also found that employees tended to connect with colleagues from the same regions where they are located. Studies have also looked at the meaning of strong and weak ties and how this relates to various forms of online engagement. Wu et al. (2010) found that the type of information published on Beehive correlated with professional and personal closeness among colleagues. DiMicco et al. (2009) conducted a study on Beehive's early adopters. This demonstrated that users perform elaborate strategies, like using Beehive to learn and construct impressions of colleagues and connect with new colleagues on a very personal level. Findings revealed that users seldom connected with close coworkers, but used Beehive to find new weak ties to extend their personal professional networks. DiMicco et al. documented that internal use of Beehive was different from external use, which is reflected in perceptions of privacy. Beehive users tended to share more personal information about themselves than expected. But DiMicco et al. conclude that Beehive users appear conscious of tailoring a professional side of themselves to fit an enterprise audience. In a similar study, DiMicco et al. (2008) make the same observations. Here, they find that Beehive is used as a tool for career advancement and to convince others to support ideas and internal projects users are working on. Researchers have reported that Beehive is used for "organizational acculturation", a process where employees learn about IBM's corporate culture. Thom-Santelli et al. (2011) reported that employees new to the company and geographically distant from headquarters perceived higher benefit from using Beehive, foremost as a tool to learn about IBM's values and beliefs.

IBM has constructed particular SNS features in Beehive, which have been tested on users and measured by researchers. The SNS features have been designed with the aim of increasing and sustaining user engagement. Farzan et al. (2008) built a reward feature that was based on giving points to users who contributed with content into the Beehive community. The findings showed that users were motivated, but proved challenging in sustaining users to contribute over a longer period. In a similar study, Farzan et al. (2009) developed and implemented a rating system to encourage SNS users to promote “diverse set of content”. The study found that seeding diverse content into an online content community contributed to forming new social interactions between Beehive users. Daly et al. (2010) designed and implemented a “recommender system”, which suggested online connections to users, but the findings showed great variance in user adoption. Dugan et al. (2008) developed a feature called “About You”, which is not dissimilar to standard user profiles used in SNSs. “About You” allowed users to describe themselves in rich ways and ask questions. After 10 months of use, Dugan et al. reported that thousands of users had created diverse questions and reused existing questions from other users in their profiles. Findings suggested that those with highly diverse user profiles had a higher number of online connections. Freyne et al. (2010) measured the outcome of a SNS “news feed feature”, which aimed at finding interesting and relevant news to be displayed for a user. Freyne et al. concluded that combining short-term interest models exploiting previous viewing behavior of users, and long-term models exploiting previous viewing of network actions, gave the best predictor of feed item relevance. Geyer et al. (2008) created a social list system. They found that many users shared online lists more than other types of content, like photographs, and that they used lists as a medium for self-representation.

Other particular SNS features in Beehive have been researched, especially bookmarking and tagging systems. Thom-Santelli et al. (2008) studied user motivation and what type of social role performance emerges from use of tagging systems among users. Employees deliberately take on different social roles, resulting in the creation of different user-groups. Employees are aware of how and why they tag, knowing that a larger audience monitors their tagging practices. Thom-Santelli et al. identified five different user types: community-seeker, community-builder, evangelist, publisher, and team-leader, who engage differently for different reasons. The differences between the user types were based on the extent to which they sought to find new ties or whether to tag to promote their own work. Thom-Santelli et al. found that tagging is seldom motivated by communication with a large audience, but was limited to a set of small user-groups. Farrell et al. (2007) completed a series of interviews with users of an SNS feature that enabled users to tag other users with keywords. The study showed that the tagging system enabled users to maintain each other’s interest and expertise profiles, meaning that users tagged colleagues as a form of contact management practice. Muller (2007b) argued that similar tagging patterns carried out by users could represent evidence of online communities. Muller (2007a) explored in a similar paper four different tagging systems used at IBM, but found that users tend to tag differently and customize their uses to the particular systems they used. Muller et al. (2006) documented how people tended to tag themselves. Millen and Feinberg (2006) described the tagging system “dogear” and showed how it could be applied to improve social navigation. Pan and Millen (2008) analyzed the actual use of a bookmarking service and explored patterns of information of sharing and social interaction among three groups in Beehive. They discovered that there are more similarities than differences across the groups, suggesting that bookmarking practices are often linked to the group they are a part of and seldom aimed at a larger audience.

Researchers have dug deeper into other SNS systems built by IBM. These have explored particular SNS features and common conditions on how to sustain user engagement in online communities. Ehrlich et al. (2007) studied the design, implementation, adoption, and use of SmallBlue, a social-context-aware expertise search system used to identify experts and resources in organizations. The findings indicated that many employees used the main features to find people, to gain insight and awareness of others, and make contact with new people. But there were challenges, like balancing between privacy and utility, creating a flexible tool to accommodate different ways of working and economic growth, making something that is easy and simple while also having a rich set of features, and creating a system that supports the subtle nuances of human communication.

Apart from IBM's Beehive project which has given organization researchers valuable research knowledge, there are other studies in the literature. These have scrutinized initial SNS user patterns. We find a series of studies giving insight into how employees use SNS for work purposes. Such research reveals that users tend to streamline their user behavior to work practices and organizational affiliation. Zhao and Rosson (2009), for example, performed a study examining how employees use Twitter for informal communication at work. Zhao and Rosson studied what types of benefits Twitter can provide for employees who choose to adopt it. Informants preferred Twitter for a number of reasons: frequent updates about personal life activities; posted tweets are real-time information on events; content sharing is a form of "personal people-based RSS feed"; and users engage because of the quality and usefulness of the tweets. Twitter is favored because of its technological features too, because one can write short messages, it is easy to access, and one can check and share posts. Twitter was also used to build perceptions of persons, to create an equal ground with peers, to have a feeling of being connected, and to share work-related information and find relevant expertise. Ehrlich and Shami (2010) reported the same findings as Zhao and Rosson (2009), but compared how employees in an organization used microblogging for internal and external communication. Ehrlich and Shami found that internal use was adopted to solicit technical assistance or create a conversation with colleagues in the organization, while external use consisted of writing status updates and sharing general information. Ehrlich and Shami showed that users exercised a high degree of self-censorship and did not share critical information about the company where they worked. Zhang et al. (2010) studied the use of Yammer. They found that Yammer is used to post updates on general news and activities in the organization, but is also seen as a type of Intranet forum. Users posted work-related news or messages intended to raise opinions. Employees posted less information about themselves. Zhang et al. show that middle managers in the corporate hierarchy, engineers and IT employees and people aged from 29 to 45 were the first to adopt Yammer, but also that a small group of core users contributed the majority of content and sustained user participation. Zhang et al. concluded that Yammer has a significant limitation, mostly because of its "noise-to-value" paradox. This means that sharing and interaction can create positive capabilities for the entire organization, but is prevented because only a small group view professional SNS as having potential while the rest of the organization does not share that perception.

A body of research has explored SNS use from a social capital perspective. Such research is prone to claiming a positive correlation between SNS user participation and organizational life, suggesting it can bring benefits and have positive effects like claiming that an employee's SNS use can reduce organizational barriers and increase the well-being of employees. In brief, the message is that informal socializing on a professional SNS can lead to the fulfillment of a work-related activity. Ferron et al. (2010) found that users of an organizational SNS at an Italian research institute had significantly higher social capital than non-users, indicating that Ferron

et al. obtained the same results as Steinfield et al. (2009), a result that has been confirmed in other studies (Sun & Shang, 2014). Friedman et al. (2014) found evidence that use of a SNS in a multinational company contributed to partial reduction in organizational barriers, especially in the middle levels of the company hierarchy. Other studies (Koch, Gonzalez, & Leidner, 2012) have postulated more bold propositions, claiming that by allowing employees to participate in work-sponsored internal SNSs, a company can improve staff moral and reduce turnover among employees. But the main conundrum with this research is that it seldom provides insights into how new bonding and bridging practices, which can contribute to reduce internal organizational barriers, are instituted but merely registers that employees are stockpiling social resources.

Researchers have examined how users communicate by using the structural properties embedded in enterprise SNSs. Chelmiss and Prasanna (2012) found that directed @-messages sent between users on a corporate microblogging service represented a “smaller” world than on online social networks, having a strongly connected core of high-degree nodes, and exhibited strong positive correlation to users’ degree. Paris et al. (2012) demonstrated that the organizational communicative culture in government agencies tended to be reflected in how they communicated on Twitter. They found that staff of a government scientific research agency used a formal tone, while those of a social service agency had a more emotional and compassionate style when writing their tweets. Jacovi et al. (2011) studied the use of a “list feature” in a corporate SNS, a functionality allowing users to put together lists of people they regarded as interesting and relevant to their work. Jacovi et al. found that users tended to follow lists of “interesting people” who are not necessarily those with whom they are most familiar, as users choose and define remote or weak ties in their online network as “interesting”.

There are studies that have examined the challenges in adopting organizational SNS, especially for knowledge sharing. Lüders (2013) found participatory divides in how employees used a corporate SNS. Based on these findings, Lüders developed two archetypical user types, the “contributor” and the “reluctant” user. The first type used the SNS to seek and extend their professional networks and embraced a culture of visibility, while the latter shared and communicated with colleagues on e-mail and chat software and saw the SNS as an information channel. Pettersen (2014) found that employees in a multinational consultant company communicated far better and more efficiently on e-mail, phone, and face-to-face, than by posting comments and waiting for replies on the company’s internal SNS, a factor that led Pettersen to conclude that social media platforms are not fitted well enough to the structural properties of how knowledge work is organized. This observation is consistent with a study of Chinese IBM employees. Yuan et al. (2013) found that employees communicate across several ICT tools to share work, which produces an unexpected outcome – “competition” between ICTs. Having too many ICT tool options leads to employees developing habits of storing and sharing their work on separate knowledge management systems. This can trigger “technological divides”, so that having too many ICT tools is not necessarily the best solution. Rooksby and Sommerville (2012), in a study of a government office’s use and management of SNSs, demonstrated a number of challenges. They found that many of the government managed SNSs were overlapping, conflicting, evolving, rooted in existing technology and infrastructure, and embedded within organizational procedures and demands. Gibbs et al. (2013) showed that engineers working in a technology company developed complex communicative strategies as social media users to meet organizational goals of being open and good knowledge sharers. To render a “culture of openness”, the engineers developed communicative strategies to give an outward impression that they were visible, engaged, and sharing knowledge, while in fact they were occupied and busy with other assignments. Mukkamala and Razmerita (2014) demonstrated that introducing social media software into an Indian technology consultancy firm

was met with low user adoption, casting light on a strange contradiction. Although IT consultancy firms are at the forefront of deploying social software, the internal use of it is rather limited among knowledge workers.

As IT companies and technology consultancy firms pave the way for harvesting experiences, we find an emerging research stream studying how the same technology is used in public organizations. This research stream, the e-government research tradition, has documented that researchers have limited knowledge of how government agencies adopt and implement social media into their organizational apparatuses. Several research papers suggest potential structural frameworks and guidelines – or “organizational recipes” – on how public organizations should approach, adopt, and implement social media fitted to their needs and public responsibilities (Bertot, Jaeger, & Grimes, 2010; Bertot, Jaeger, & Hansen, 2012; Bonsón, Torres, Royo, & Flores, 2012; Jaeger & Bertot, 2010; Linders, 2012). Studies show that public organizations adopt social media to create dialogue and maintain initiatives with citizens (Meijer & Thaens, 2010). Bonsón et al. (2015) examined Western European local government Facebook pages only to find that much of the published content did not seem to be relevant for citizens, as much of the published material was photographs and URL links to cultural activities, sports, and marketing related topics. Reddick and Jaramillo (2014) found that Canadian citizens use social media and have high service expectations, demanding timely updates of information and responses to private inquiries. Reddick and Norris (2013) showed that public organizations tend to use social media as a one-way communication channel, although aiming at creating a dialogue with citizens. This is also documented by Saulles (2011) who found that English local government agencies often used social media to perform a “pushing-out-of-information” communicative strategy. Cumbie and Kar (2015) conducted a large survey of local government’s use of social media, the results of which illustrated that many public organizations merely register and have an online presence on popular social media sites like Facebook and Twitter. Joseph (2012) documents some of the same tendency and shows that a range of US government agencies adopt various social media platforms by creating official accounts, a finding consistent with studies of how Norwegian municipalities adopt Facebook pages (Liste & Sørensen, 2015). Landsbergen (2010) found that when governments have developed clear strategies for how to use and adopt social media, costs and risks are reduced and they can meet future expectations and challenges.

Studies of wikis in organization studies

Surprisingly, there is a substantial body of research that has surveyed the role of *wikis* in organizations. This research stream argues that such wiki use contrasts with ordinary wiki use in public or educational contexts. Researchers position wiki use in organizations as an extension of the knowledge management research stream (Levy, 2009; McKelvie, Dotsika, & Patrick, 2007; Sousa, Aparicio, & Costa, 2010). Researchers argue that wikis have many potential areas of application and can be used to fulfill distributed work processes, to collaborate, to share knowledge, and to be embedded in project work; they are easy to use, and have great grassroots legitimacy (Grace, 2009; Kane & Fichman, 2009; McKelvie et al., 2007; Wagner & Majchrzak, 2006). We find a series of studies giving insights into how employees use wikis for work purposes. Many studies have measured the benefits of using wikis and common user patterns. In an early study, Majchrzak et al. (2006) completed a survey among 168 corporate wiki users and found that many wikis are sustainable, when seen over a longer time frame. Findings showed that wikis can be maintained from 12 to 24 months. Wikis have on average 12 main contributors and 25 co-contributors or lurkers. Findings also demonstrated that the older a wiki is, the more likely it is to be maintained and have contributors. We learn that when information is credible and tasks require novel solutions, wikis are perceived among users as being useful.

Majchrzak et al. found that users see three types of benefits of a wiki; enhances reputation, makes work easier, and helps the organization to improve its work processes. Wiki users contribute by taking on the roles of either “adders” or “synthesizers”.

As an extension of the latter finding, studies have explored what roles performance users take on. The common assumption about wiki contributors is that they usually consist of a core group who produce content and maintain the wikis. But there are also “hidden” user-groups who streamline and work on content that is already online, a sub-user group Yates et al. (2010) studied and called “shapers”. Shapers are “content editors”, who take on the role of organizing knowledge to a much more advanced level. Yates et al. find that shapers are seldom managers or members of a community’s core group, which is contradictory to prior assumptions. Rober and Cooper (2011) showed how different groups of wiki users can be applied to bridge knowledge gaps between generations in organizations. Rober and Cooper uncovered that a grassroots-motivated wiki managed linking and sharing knowledge among “Gen Y” and “Baby Boomers”. There is a trend within the “corporate wiki genre” to operate with new types of wiki genres, which often follow as a consequence that users apply them in different ways and adopt wikis for their work practices. This aspect was subject to a study by Poole and Grudin (2010) of wiki use in an IT company. Poole and Grudin created a taxonomy of three new wiki genres, based on how employees used corporate wikis. Wiki users tended to group themselves as “single-contributor wikis”, showing how they used wikis as personal information management tools or as edited web pages. The employees also used wikis as “group or project wikis”, to perform team or project collaboration and “pedias”, a type of Wikipedia-like encyclopedia of the company. Stocker et al. (2012) found that wiki users appropriate corporate wikis to be used as “Knowledge Base”, “Encyclopedia” and “Support Base”, implying that employees adopt wikis to support various types of work processes. Lin and Ehrlich (2012) make a similar observation in their study of a large organization and identify new wiki genres; they called these four archetypical application scenarios of enterprise wikis: “presentation & communication”, “encyclopaedia”, “project organization” and “collaborative design”.

Researchers have recorded successful adoption of wikis into organizations and posed frameworks that can enable positive implementation (Bhatti, Baile, & Yasin, 2013). Kosonen and Kianto (2009) found that successful wiki adoption requires social aspects of organizational life to be taken into account, like embracing the role of corporate champions, understanding internal branding, and seeing the importance of a supportive organizational culture and informal social networks. Hasan and Pfaff (2012) investigated important factors to consider when introducing wikis into organizations. They conclude that a cooperative-knowledge friendly atmosphere and involvement of top management are essential and that wikis can help to democratize organizational knowledge. In this regard, Arazy et al. (2009) completed a groundbreaking study giving much insight into successful adoption of wikis. And yet again, IBM surfaces as the successful company to look to. In 2004, IBM introduced wikis, but did not follow a structured top-down implementation process. By 2007, the company had almost 150,000 wiki pages. Early adopters with professional backgrounds in IT were the main contributors to the great growth. Arazy et al. reported that wikis were used to support a variety of tasks and that users were motivated by the enjoyment of being contributors. Wikis replaced existing collaborative tools and had a greater growth rate than any other collaborative tool on record. Arazy et al. conclude that successful adoption depends upon wikis not being imposed by the top management, and that one has to understand their high flexibility and empowering capability, enabling collaboration across organizational structures. Mansour et al. (2011) attempted to understand factors influencing the use of wikis in a large multinational contracting organization. They found that wikis were both a barrier and an enabler to collaboration and

knowledge sharing. The openness of wikis could lead to employees feeling uncomfortable with accepting comments from colleagues and commenting on contributions from their superiors, but users also recognized that wiki collaboration could lead to formation of new ties, a finding made in similar studies (Pfaff & Hasan, 2011). On the other hand, there is a tendency for research into how large organizations adopt wikis and little about how this takes place in small companies. Stieglitz and Dang-Xuan (2011) studied this factor. They found that a majority of German small and medium-sized enterprises did not intend to adopt wikis, but firms that had already introduced wikis seemed to benefit and used them as part of their work practices.

Besides research reporting successful use, some studies contradict the above research results, showing challenges with implementing, adopting, and sustaining wikis. Garcia-Perez and Ayres (2009) demonstrated how a wiki was first successfully adopted and implemented to support a group of researchers, but soon experienced a rapid decline in user activity and contributions, as wiki use was minimal and sustained by a core user group. Giordano (2007) examined more thoroughly a case of rejection of wikis. Giordano shows how the launch of a wiki intended to foster joint learning among a group of health workers affiliated to a non-profit, community-based organization was outright aborted as the practitioners could not work together. The goal was to create a community of practice around a wiki, but Giordano illustrates great barriers to adoption. Wikis can indeed fail, due to users' unwillingness to contribute. In Giordano's case, the contributors set a "price tag" on sharing. This implied that contributing something to a wiki page was not viewed as paying off and bringing tangible results. Instead, wiki contributions were seen as a means of personal branding. Knowledge sharing is rather something that one has to learn through behavior, meaning that wikis must be integrated into existing work practices to become successful. Holtzblatt et al. (2010) also found similarities in their study, indicating that employees can exercise a high degree of control on what they are willing to share on an organizational wiki. Publishing content on a wiki can in fact be seen as a great risk to organizational knowledge. And this can be on very specific issues. Holtzblatt et al. found that wiki users offered a number of arguments for not contributing to knowledge on a wiki: sharing can be viewed as a cost; it takes time to perform; some information is not meant to be shared on wikis; and some users refuse to publish "unfinished work", etc. Holtzblatt et al. also uncovered other factors preventing knowledge sharing: employees do not want to learn a new tool; wikis are not part of current work practices; a lack of organizational guidelines; and a reluctance to edit the contributions of coworkers.

Danis and Singer (2008) identified similar patterns. They completed a comprehensive study of a top-management driven implementation of a wiki in a large research organization, intended to replace an older technology used in project proposal processes. The study addressed a classic challenge seen in many knowledge organizations: how wiki is seen as a means to bring down internal barriers, give a better overview, and connect employees by sharing work. Danis and Singer describe an organization where sharing and openness on project proposals is rather a complex power play among researchers. Instead, coworkers monopolize knowledge and seldom share, as there is a battle over resources. Danis and Singer demonstrate that introducing a wiki can change established work practices, but this takes time to realize. They also find that employees are reluctant to modify the contributions of others. Grudin and Poole (2010) attempted to investigate success factors and challenges for sustainability of wikis in a scientific and engineering organization. They also identified mismatches between the top-management expectations and what successful wikis actually deliver, meaning that middle managers are often caught between an unrealistic vision and the enthusiasm of individual contributors. Grudin and Poole find that how wikis are initially deployed has consequences for the organization of data and content in wikis. The study is also a reminder that introduction of wikis

often happens in an existing information ecology and corporate culture, implying that wiki is another tool that must be learned. Grudin and Poole also show that employees are unfamiliar with the collaboration model inherent in wiki. On the other side, wikis prove to be most successful in supporting newly established groups or short-term activities. Jackson and Klobas (2013) also investigated some of the same aspects on why certain employees contribute and others do not. They found that users often draw on institutional scripts on information sharing behavior and use certain norms and premises from the industry they work in, at organizational and sub-unit level, to decide on whether to use wikis or not.

Tentative conclusions from research on social media in organization studies

What tentative conclusions can we draw from the examined research stream? First, organizational research on social media reveals that organizations are experimenting and attempting to ascertain knowledge on initial uses and practices, which firstly takes place in research orientated multinational technology companies. Second, current research tells us that enterprise social media platforms generate forms of professional online social network activities which can be claimed to create both positive and negative effects. Employees use social media platforms for social networking purposes and to carry out a variety of light “work tasks”, which show evidence of attempts at bridging of social capital in social networks in organizations. But the main challenge is the difficulties of them becoming socially institutionalized, bringing organizational change, and becoming an integrated part of work practices and work processes. This leads instead to stockpiling or capitalizing of online social networks and social resources. Third, this observation therefore shows that social media platforms have great challenges in becoming organizationally sustainable. We find the common pattern that a core group of users adopt the technology and maintain network activities, while a larger group of users remain and use “older” ICTs. Fourth, research indicates that various forms of online sharing are challenging and a great threshold for most users to perform. And fifth, there are still unanswered questions on the use and potential impact of social media on organizational life, apart from the successes and insights reported in IBM’s Beehive project.

3.3.2 Relevant research horizon on social media in educational research

Educational researchers have examined the role of social media in education systems differently than their colleagues in organization studies. This difference derives from the way educational researchers have attempted to frame how social media can be used and adapted to fit learning. This research is confined to higher education, meaning that researchers know more about how social media is used in universities than in the lower levels of national education systems. This is reflected in much research, which predominantly has university students as informants. Surveys indicate that adoption of Web 2.0 is scarce among academics, but is used within a range of fields, especially within the Humanities and Social Sciences where blogging and wikis are popular (Gray et al., 2012). The research field appears to lack a core group of researchers who have extensively designed social media applications and tested and measured their outcomes on students in a single organizational context, as we saw with IBM’s Beehive. Research tends to circle around the performance of a diversity of scholars and has much case study design.

Studies of SNSs in educational research

SNSs have received considerable attention, especially Facebook. Surprisingly, reviews maintain that educational use of Facebook among students is small and warrants further research (Aydin, 2012; Hew, 2011; Manca & Ranieri, 2013). Researchers have documented

that students use Facebook for socializing, online communication, and leisure activities. Facebook is used to maintain and extend existing social ties, especially with friends and family members. Research has established user patterns among university students, but Facebook practice among high school students is a more uncertain area (Hew, 2011). Studies report on use among students in North American and UK universities. There is a norm of reporting that 95 percent of students in surveys have a Facebook account. Studies have reported that students use Facebook to maintain contact with high school classmates and meet new people (Ellison, Steinfield, & Lampe, 2007; Ophus & Abbitt, 2009; Pempek, Yermolayeva, & Calvert, 2009), to boost their online popularity (Urista, Dong, & Day, 2009), to express themselves (Joinson, 2008), and to initiate student activism (Bosch, 2009). Students spend between 10 and 60 minutes a day on Facebook and have personal online networks ranging from 150 to 400 connections. There is widespread evidence that in practice students tend to connect with ties with whom they already have an established relationship (Christofides, Muise, & Desmarais, 2009; Ellison et al., 2007; Lampe, Ellison, & Steinfield, 2006; Pempek et al., 2009). Female students have larger online networks than males (Pempek et al., 2009). Students vary in how they evaluate privacy, as they disclose various types of information about themselves. They publish their full names, birthdays, hobbies and interests, and relationships status, but refrain from putting their phone numbers and physical address on their online profiles (Christofides et al., 2009; Young & Quan-Haase, 2009). This is confirmed in other studies, which report that students do not bother setting restrictions on profile visibility, while some find the opposite to be the case (Kolek & Saunders, 2008; Pempek et al., 2009). This suggests that students are used to managing online identities. We also find research that has investigated students' motivation to quit using Facebook. Dindar and Akbulut (2014) found that Turkish pre-service students' reasons for quitting Facebook included waste of time, disturbance, lack of interest, privacy concerns and coping with break-ups.

A number of studies have investigated the educational use of Facebook. One of the first studies conducted by Selwyn (2009), for example, demonstrated that very few university students used Facebook to carry out assignments. Instead, they use it for post-hoc critiquing of learning experiences, to coordinate logistical tasks around assignments, give moral support, and promote oneself as academically disengaged. Selwyn identifies that Facebook is mainly used for online socializing and should be understood as a reflection of students' inauguration into undergraduate life. This finding is corroborated in other studies (Grosbeck, Bran, & Tiru, 2011), which conclude that Facebook is a form of "social glue", facilitating students' entry into university life (Madge, Meek, Wellens, & Hooley, 2009). Madge et al. (2009) also report that the students themselves state that Facebook should *not* be used for formal learning. Later studies have sustained and maintain the conception that students prefer to use Facebook as a site for socializing and emotional support and seldom for formal learning (Erjavec, 2013; Prescott, Wilson, & Becket, 2013; Souleles, 2012).

Researchers have explored Facebook's educational value in light of instructor/student relationships. Roblyer et al. (2010) reported that university students are more open to using Facebook, while faculty staff prefer older technologies like e-mail. Maman and Usluel (2010) attempted to predict potential variables influencing educational use of Facebook, and found that it depends on a positive relationship with usefulness, ease of use, social influence, and community identity. Amador and Amador (2014) showed that students used Facebook for academic advice, as they wrote messages to their advisor, wrote on their wall, and read messages in their news feed. We also see that the negotiated boundary educators and students tended to draw in the "off-line world" is reflected in Facebook use. Prescott (2014) found that faculty staff draw a clear distinction between using Facebook as an educational tool and for

socializing. Prescott shows that a large majority of faculty staff surveyed at UK universities socialize on Facebook, but seldom see it as a tool that should be integrated into academic activities. Veletsianos and Kimmons (2013) completed a similar study which found that faculty have challenges in reconciling personal Facebook use with professional identity, as they experienced a need to establish personal boundaries between faculty and students, resulting in them resisting the use of SNSs. Sumuer et al. (2014) studied Turkish teachers' Facebook use, finding that K-12 teachers integrate Facebook into their daily lives and use it for socializing, entertainment, and information sharing. Teachers disclose their personal identity, but have the same perception on privacy as their students – both parties keep a distance from each other on Facebook. Mazer et al. (2007; 2009) performed an experimental study in which they manipulated the public image of a teacher, thereby disclosing personal information on a Facebook group as part of a university course. The study demonstrated that the more a teacher disclosed personal information, the more it created a positive learning environment, better motivation, and it stimulated more affirmative teaching. Hutchens and Hayes (2014) investigated whether an educator in higher education having a Facebook page could have an impact on students' perceptions of teacher credibility. This work indicated that there were no significant differences among student perceptions of instructor credibility based on whether or not an educator used Facebook. Aydin (2014) explored educator and learner relationships on Facebook among Turkish students and found that many students prefer to have a passive relationship with their instructors, meaning that they just monitor Facebook updates, "like," etc. Female students were more willing to engage with their teachers on Facebook than male students.

Educational researchers have also tried to scrutinize how SNS use has potential in educational design. Donlan (2014) explored UK university students' Facebook use and found that students expressed interest in using Facebook for formal learning, but their online interactions proved little interactivity. The students tended not to comment and share links and were unwilling to share resources they encountered. The students used Facebook for peer-to-peer communication around group work and assessment, an activity not always conceptualized as learning by the students. This led Donlan to conclude that students have yet to master the art of collaborative learning. Dyson et al. (2015) completed a similar study and found that implementing a Facebook group for a university course was challenging and experienced low student engagement. Contradictory empirical findings exist, however, which substantiate that active SNS can be applied to reflection upon practice. Goodyear et al. (2014), for example, performed a longitudinal study on a group of teachers who regularly tweeted and faceworked, concluding that it promoted teacher inquiry and encouraged them to work and develop their practice to support professional learning. Cooner (2014) completed a similar study, but studied how Facebook was used by social work students as a site for reflection to develop professional knowledge. Closed Facebook groups have proved to be valuable, as they allowed students to contemplate with each other, serving as a means to prepare them to tackle core practices expected to surface in the work of a social worker. Yuksel (2013) also finds a similar pattern in a study of student teachers studying foreign language in English. A closed Facebook group was created and the students discussed their practices, with the result that reflection and commenting on each other experiences led to identifying and correcting the practice of peers. Bosch (2009) discovered that SNS use provided a number of benefits, as academic Facebook group use allowed students to find learning material, to answer questions about course logistics, and to share study and lecture notes. Fewkes and McCabe (2012) demonstrated that Facebook groups were used to perform a variety of educational assignments, like posting answers on biology and chemistry tasks and following discussion on a reading package as part of preparing for exams. Greenhow (2011) argues that Facebook can serve learning in positive ways. On the one hand,

Facebook can serve as an instrument for learning, like providing an emotional outlet for school-related stress, validation of creative work, peer-alumni support for school-life transitions, and help with school-related tasks; while on the other hand, SNS can enable social and civic benefits. Davies (2012) argues that the ways that students manage and organize their “online self”, often known as “faceworking”, represents a new literacy practice. Online social communication is part of a “text-making” practice, which can have educational value.

Researchers have compared particular features of SNS with more “traditional” educational technologies, which are widely used in formal learning, like Learning Management Systems (LMS). DeSchryver et al. (2009) compared Facebook with the LMS Moodle, to determine if there were differences in using Facebook as a discussion forum in an online course. The study found none, as students did not write longer discussion threads, but navigated between both systems. Deng and Tavares (2013) completed a similar study, showing that students were motivated to publish, discuss, and initiate threads on discussion forums on Facebook more than on Moodle. Wang et al. (2012) tested if Facebook groups could be used as a LMS in a university course. The findings showed that the students had a positive view. Facebook groups could easily be set up to administer course material, but it was difficult to structure online discussions and students felt unsafe, as it raised privacy concerns. Maleko et al. (2013) compared a Facebook group with the LMS Blackboard Discussion Forum in a university course in computer training. Students’ postings were analyzed in both platforms, leading Maleko et al. to conclude that the use of Facebook group fostered better conditions for social learning than Blackboard. Lantz-Andersson et al. (2013) performed a similar study of a Facebook group in English-learning classes, with 60 students aged from 13 to 16 in Colombia, Finland, Sweden, and Taiwan. The results indicated that there is a possibility for what they call “boundary crossing”, which can create an extended case for collaborative learning activities where students combine their school subject learning activities with their own way of communicating from their everyday life. Reid (2011) argued that closed Facebook groups can be used to foster writing and literacy practices. Reid showed that students’ “out-of-school literacy practices” can be developed and merged into the academic domain, a factor proven to be valid when students are allowed to reflect upon their own writings.

Tsovaltzi et al. (2014) performed a controlled experiment study by use of a Facebook app and found that group awareness support and use of argumentation scripts could influence learning among students. But the research results demonstrated that group awareness support in argumentative processes can be counterproductive for learning too, as argumentation scripts may lead to possible negative effects of such group awareness. There are studies that have attempted to establish if students take the initiative themselves to use Facebook for educational purposes. Lin et al. (2013) examined knowledge dimensions and cognitive processes in a project-based online discussion by using Facebook in an adult education course. Based on the students’ published content, they found that most online educational discussions mainly focused on understanding and comprehension of assignments, but they also find that female and older students tended to engage in “off-topic” discussions. Hrastinski and Aghaee (2012) uncovered in an explorative study that students combine a variety of web tools and fit them to different practices. Only half of the informants used social media for academic purposes. Students communicate on instant messaging and e-mail to stay in contact with co-students and educators, but also coordinate assignments over the same channels. Facebook is used for socializing, while YouTube videos and Wikipedia are used for information retrieval. Hrastinski and Aghaee found that few students used Google Docs for collaboration on group work or to retrieve information.

There is an emerging body of research critically questioning the relationship between SNS use and academic performance, challenging the notion that today's youth are "digital natives". This research is concerned with debunking the assumption that educational use of social media can provide positive learning outcomes. Kirschner and Karpinski (2010), for example, found that Facebook users had lower self-reported Grade Point Average and spend less time on studying compared with non-Facebook users. Kirschner and Karpinski concluded that Facebook use has a negative effect on academic performance, a factor which the students themselves report, as they cite procrastination behavior on their part. Junco and Cotten (2012) drew the same conclusion from a large survey where they correlated students' multitasking patterns with academic performance and determined that multitasking with certain ICTs is negatively predictive for overall college academic performance. This is reconfirmed in another study carried out by Junco (2012), which concluded that time spent on Facebook was strongly and significantly negatively related to overall GPA, while only weakly related to time spent preparing for class. These studies often stress that multitasking between various ICTs and Facebook tends to act as distracters and is an explanation for low academic performance among students, but the relationships between them are not well understood. Rosen et al. (2013) also corroborate some of the same findings in a laboratory experiment study. This showed that students only lasted on average six minutes before they were distracted and switched to another activity. Rosen et al. observed that students who accessed Facebook one or more times, tended to have lower grade point average than students who did not. This led them to conclude that students who access Facebook tend to have lower academic performance than non-Facebook users. Wood et al. (2012) performed a study that examined the impact of multi-tasking with digital technologies while trying to learn from real-time classroom lectures in a university setting. Wood et al. tested several multi-tasking activities in an experiment-based study with control group design, foremost to determine if students using Facebook and MSM performed better or worse than students who completed learning activities by pen and paper. Findings proved that students who used only pen and pencil outperformed students using digital technologies. Judd (2014) conducted a similar study that investigated these relationships. Judd concluded that elevated levels of multitasking have the capacity to reduce the overall effectiveness of students' self-directed study.

There is also literature contradicting the abovementioned studies, however. Researchers claim that use of SNS in teaching can foster positive learning outcomes. Robelia et al. (2011) found that use of a Facebook application, which allowed users to post and comment on stories on climate change, scored above average on knowledge of climate change science. In fact, as users engaged and discussed issues on climate change in an online community, this is claimed to have motivated participants to learn more about the subject. There are also similar studies that assert that SNS use can have positive impacts on academic performance, but these are limited to pointing out potentialities. Kabilan et al. (2010) asked rather directly if Malaysian university students found Facebook to be useful and meaningful for learning English, and a vast majority stated that it could. Ekoç (2014) completed a similar study which aimed at using Facebook groups as a tool for language learning in a classroom setting. Ekoç's findings were also dual; the study found that students posted and commented, but also that they disengage from online discussions. Barden (2014) gave a surprising result. He showed that a group of students, whom one would not expect to use Facebook for learning purposes, dyslexic students, were motivated and used it for critical learning to learn more about dyslexia and literacy. Facebook pages acted as a "pedagogical hub", which increased their control over their literacy and learning. Singh (2013) performed an experimental study on use of Facebook groups in a university course in computer science. Some Facebook groups were assigned an instructor. The study concluded that there were no significant differences except that the instructor-orientated Facebook groups

had course-specific discussions and were more focused on learning. McCarthy (2012) completed a long-term study which aimed at using Facebook as a collaboration and e-mentoring learning environment that linked students from two universities, one in Australia and the other in the US. Students, faculty, and industry professionals from the media industry took turns in commenting and guiding each other's work over several semesters. McCarthy concludes that the collaboration was seen as positive, useful, and strengthening professional bonds among the participants.

Studies of YouTube in educational research

Educational researchers have also examined the learning potential of YouTube. Here, we find studies arguing that YouTube use in formal learning have potential benefits, an aspect that health educators have explored in higher education. Agazio and Buckley (2009) find that YouTube videos are an effective way to illustrate theoretical content, involve students, stimulate student discussions, share information, and create a learning community. This finding is confirmed in other studies, as Clifton and Mann (2011) showed that YouTube can provide deep learning. Green and Hope (2010) used YouTube videos to develop a student-centered learning design and demonstrated that it could enhance the students' ability to synthesize knowledge gained through class activities and research, a learning practice which could be used to educate their clients. Other health researchers have browsed YouTube for videos and evaluated that such content contained quality standards suited for dental (Knösel, Jung, & Bleckmann, 2011) and medical training (Azer, Aleshaiwi, Algrain, & Alkhelaif, 2012; George & Dellasega, 2011). Other health researchers warn however against uncritical use of YouTube videos and find that very few videos can be evaluated to meet high academic standards (Duncan, Yarwood-Ross, & Haigh, 2013; Smith & Peck, 2010).

Besides the above work, researchers have explored how YouTube use can be embedded into ordinary learning settings. In an early study, for example, Snyder and Sloane (2008) found that students were enthusiastic consumers of YouTube videos in a classroom setting, especially male and first-year students. Buzzetto-More (2014) demonstrated that students under an instructor supervision are likely to visit video-sharing services from mobile devices, but that the length of videos can influence the students' decisions whether or not to watch them. Alston and Ellis-Hervey (2014) examined how black female students used YouTube as an informal learning space to vlog, demonstrating that sharing of experiences on self-made videos by personal storytelling contributes to a space for deep learning. Mitra et al. (2010) found similar results based on a survey of a more than 130 university students. Here, YouTube videos were embedded into courses and findings showed that they could be valuable as an educational tool in three fields. They can activate learning; students are able to connect course material with their existing knowledge of a subject; and they are suitable to fit in to an overall blended learning approach. Alon and Herath (2014) found that students had positive perceptions of YouTube and it helped to promote an understanding of teamwork. They also learned that students viewed YouTube use as more productive and enjoyable than using traditional learning techniques. Lichter (2012) showed that embedding and encouraging students to make YouTube videos as part of a chemistry course could have a positive outcome on learning results. After the completion of the chemistry course, an assessment was carried out by comparing results with common exam questions. The findings indicated that students had learned the learning objectives from the course and it promoted interest in chemistry, which has also been confirmed in similar studies (Franz, 2012). Wang et al. (2010) developed a YouTube-like system called MeTube and introduced it to a group of computer science students. This was used over a semester and involved regular assessment of the students' learning progression. Evaluation showed positive results across several areas. Students reported having collaborated, they

learned the learning material on their own, they connected course material to their own experience, and it provided the students with opportunities to work with real-world problems.

Educational researchers are increasingly claiming that YouTube's strength lies in its capacity to engage students to participate in formal learning (Haugsbakken & Langseth, 2014). June et al. (2014) used YouTube videos for an entire semester among a group of Malaysian students to interpret a role play as part of a university course. They found that YouTube videos motivated students to participate actively, take interest in the learning process, understand lectures better by visualizing the content and relating it to their workplace, and enhanced their critical thinking. Roodt and De Villiers (2011) compared students' use of YouTube videos in two classes at the University of Cape Town. They found differences in student engagement, but concluded that YouTube videos can have a positive effect on overall engagement as well as on behavioral, emotional, and cognitive engagement, which is also a finding consistently seen in earlier studies (Werner & Frank, 2009). Zahn et al. (2014) completed a quasi-experiment on a YouTube learning design. They compared two groups of students: one was given the task to collaborate and make YouTube videos on obesity stigmatization and the other to read news articles on the same topic, where the latter acted as a control group. The study concluded that students who made YouTube videos gained far higher understanding than the control group. Chtouki et al. (2012) completed a similar study with the same design, but this concerned a class in computer science. A group of students used YouTube to learn about computers, while a control group used ordinary learning material like books to learn the same content. The results show that students understood and remembered complex concepts much better when they were exposed to a visual explanation by video. This is also supported by Carlisle (2010), who applied a similar design in a course in Java programming. Carlisle asked the students how often they watched the videos and did their readings, and how much these activities contributed to their learning. When the lecturers reduced lecture time and increased lab time, the students watched videos and read significantly more. The test scores were at least as high as before and the students indicated they would prefer to have the reduced lecture time.

There are also other studies contending that YouTube use engages students to participate in formal learning. O'Mara and Harris (2014) argue that YouTube can be used to bridge cultural, gender, and educational gaps, an argument they make in a study of an arts-based education pathway program pilot for young people from migrant and refugee backgrounds. Tan (2013) explored how students used YouTube videos in a classroom study as part of an introduction to Anthropology. Tan was largely interested in exploring informal learning and learning spaces where such might occur. Her study showed that students used a wide range of strategies to evaluate YouTube content and relate it to their own experience and learning process. Forristal (2012) conducted a similar study, aimed at using and introducing students to a socio-cultural perspective on tourism by using high quality YouTube videos. The students adopted the learning design and it was well received. Lee and Lehto (2013) applied the Technology Acceptance Model to measure determinants affecting behavioral intention to use YouTube among more than 400 students. The students were given the possibility to engage in procedural learning through YouTube in a lab setting. Their study found that behavioral intention was significantly influenced by both perceived usefulness and user satisfaction and that task-technology fit, content richness, vividness, and YouTube self-efficacy emerged as significant predictors of perceived usefulness. Jung and Lee (2015) carried out a similar study of students and educators from Japanese and American universities, where they attempted to determine the factors influencing acceptance of the use of YouTube in an educational context. They found that cultural environment and the roles of the teachers and the learners influenced user acceptance. Other studies have attempted to predict how teachers embed YouTube in their

teaching practices and what value they ascribe to it. Krauskopf et al. (2012) studied a sample of German pre-teachers and found that teachers focused on YouTube as an audio-visual medium and as a searchable database with additional Web 2.0 features.

Studies of blogs in educational research

There is a body of research that has explored the educational use of blogs. Educational researchers argue that blogging has a number of technical features that can be used in learning or academic training. Educational researchers are prone to developing various theoretical socio-cultural technical frameworks or pedagogical models, which explain how blog features can be integrated into a practical educational design and create online learning environments (e.g.: Fessakis, Tatsis, & Dimitracopoulou, 2008; Kim, 2008). For example, one has suggested that blogging could be used in language classes (Ducate & Lomicka, 2005) and to create particular online learning environments (Farmer & Bartlett-Bragg, 2005). In early conceptual work, we find that studies explored the reasons on why students start to do so. Nardi et al. (2004) investigated key motives and uncovered a number of reasons. Documenting one's life; providing commentary and opinions; expressing deeply felt emotions; articulating ideas through writing; and forming and maintaining community forums were key motivators, findings also consistent with Menchen-Trevino's (2005) work. Early studies were enthusiastic about establishing that blogs could foster reflection and critical thinking, especially since blogs enabled learners to access each other's work and be part of online learning communities. Lin and Yuan (2006) conducted an early experimental study, finding a positive correlation between students' academic performance and attitudes toward a willingness to reflect upon their learning. Lin et al. (2006) implemented a blog community system as part of a long-distance course and claimed that blogging was an effective tool for students to document their learning, share experiences and knowledge, and have direct interaction with peers, a pattern reported in similar studies (Jefferies, Warren, & Bullen, 2007).

Researchers have continued to explore students' perceptions of blogging and areas of usability. Goktas and Demirel (2012) found that student teachers perceived blogs to be an important tool that changed their perceptions of ICT in a positive way and familiarized them with ICT. Tang and Lam (2014) explored perceived features and characteristics of turning blogs into an online learning community among student teachers and faculty. They concluded that active participation and high quality interaction are key factors that forge meaningful and sustainable learning processes, patterns identified in other studies (Kim, Chacko, Zhao, & Montclare, 2014). Deng and Yuen (2012) investigated students' perceptions of academic blogging, showing it to be a mixture of individual, social, and academic factors. Deng and Yuen suggested concrete measures to sustain and make academic blogging successful, based on the principle that educators must be able to mobilize students to become content creators. This can be achieved by identifying the students who have the potential to become self-driven and recruiting them as early adopters and thus to channel their positive energy into bonds among participating students. Researchers have suggested that blogs have other areas of application. Elola and Oskoz (2008) indicated that use of blogging could foster intercultural competence between students from various countries and act as an instrument to build gaps across languages and cultures in foreign language training, as shown by García-Sánchez and Rojas-Lizana (2012). Researchers have argued that blogging can be used to realize collaborative processes in drama studies and support creative group work, student engagement, and reflective practice (Philip & Nicholls, 2009).

A significant sub-theme that has generated studies, however, connects to investigating the ways blogging can potentially be used as a tool to foster *reflection* in academic training. This is a consistent theme generating empirical findings and experiences. A common research design is how blogging is integrated into an education course and used by students to achieve a particular learning goal or cover a theme by use of reflection, which is measured and evaluated by researchers. This has many designs, as blogs are used as part of a classroom setting, compared with LMS or creating an online community (Mansor, 2011). In an early study, for example, Zagal and Bruckman (2007) analyzed students' blog entries on a blog system for supporting reflection on game-playing experiences. Zagal and Bruckman demonstrated that when students reflected upon their gaming experiences it fostered deeper understanding and students starting stepping back from their traditional role of "gamers" or "fans" and engaged in reasoning critically about the games they were studying. Van Wyk (2013) explored the outcome of a course that involved creating an online community around a blog in economics education, claiming that this promoted good relationships between students, allowing them to exchange ideas and information on teaching practices, providing opportunities to interact and enter into dialogue and reflective practice. Wood (2012) demonstrated that blogs can be used to create a "liminal" learning space, where student teachers used reflection to develop creative ideas they could use later in their professional role as teachers, a research result confirmed and explored in similar studies (Fletcher & Bullock, 2012; Freeman & Brett, 2012; Hutchison & Wang, 2012). Alm (2009) argues that blogging's reflective capacity could stimulate language learners to express themselves and offer a "protected space", allowing them to be in control and to find learners with the same experiences as themselves. Yang (2009) reported how a blog was used as a discussion forum, enabling student teachers to engage and examine their own reflection process. The findings showed that the student teachers actively discussed teaching theories and critically evaluated their implications for future practice. Jimoyiannis and Angelaina (2012) studied user engagement among a group of Greek students and concluded that the role performance of students achieved higher thinking and cognitive levels.

There are a number of studies reporting contradictory results, showing the challenges in creating student engagement across different levels. Researchers have investigated factors that might potentially influence or enhance student engagement. Freeman and Brett (2012) argued that frequency of writing, resonance of the topic with the students' own interests, and the timeliness of entries, were key factors in sustaining student engagement. Cakir (2013) found in a study of a pre-service teacher education program that user engagement was related to student motivation, the reasons for using a blog in an education course, and the level of challenge perceived by the students. Timotheou (2014) showed how a group of adult learners followed a professional blog in a distance online course. The adult students reported *reading* a professional blog, but they did not participate by commenting or replying to any posts, meaning that they just monitored and took the position of "online readers". Reupert and Dalgarno (2011) found mixed responses to the use of blogs as a learning tool among student teachers. Students who found it useful saw its utility in developing behavior management strategies, venting emotions, and supporting each other, while others considered blogs an imposition on their time and questioned the usefulness of peer advice. Rourke and Coleman (2009) conducted a study aimed at using blogs to create a reflexive and collaborative space where students could discuss and reflect on personal experiences while completing a compulsory arts industry internship. The findings demonstrated that students collaborated and discussed their work practices, but blogging did not offer students the reflective learning space that a digital blog diary could provide. Wolf (2010) studied how blogging could be used as a reflective practice to increase exchange between students and make students to feel more connected when entering university. Wolf demonstrates limitations in blogging, as student performance varies, as some students

merely blog to pass courses to obtain study credits, while others actively connect with peers wanting feedback on their work. Yang and Chang (2012) performed a quasi-blog experiment on two groups of students over two semesters, where one group was asked to comment actively on each other's individual blogs, while the other group was only asked to create a blog and not comment on each other's postings. Yang and Chang concluded that when students are asked to engage and learn from each other by blog commenting, this is most likely to give positive attitudes towards academic achievement in course subjects. Deng and Yuen (2011) performed a study of the user engagement among two groups of student teachers during their teaching practice. They found that blogging had limitations, as students used blogging as a means to give each other emotional support and express reflective thinking, but they seldom used it for in-depth learning, causing Deng and Yuen to conclude that blogs are primarily a tool for personal broadcasting and reaching.

There are studies that demonstrate the challenges in implementing and sustaining blog communities. These studies have treated the "big" question the extent to which blogging and reflection lead to learning. Deed and Edwards (2011) investigated students' blog entries on a course with 400 enrolled students. The students were organized into groups and used blogs as part of the course program over a semester. Deed and Edwards found that students tended to use blogs to finish their assignments effectively, rather than to engage in academic thinking and pursue a knowledge process to learn more about educational thinking. Halic et al. (2010) showed a similar tendency. Their study focused on students who were required to engage in blog conversations, which was part of a large lecture class and intended to promote reflective learning, in a course lasting a semester. Halic et al. (2010) found that a majority of the students reported that blogging enhanced learning and led them to think about course concepts outside the classroom, but fewer students perceived value in peer commenting. Besides this, research shows that students can choose to disengage and not participate in courses where blogs are used for learning purposes. Gleaves et al. (2007) showed in a study that students tended to create incomplete blog entries, leading them to conclude that educators have challenges in motivating their students to engage in reflexive criticism and writing. Kerawalla et al. (2008, 2009) demonstrated, in a study of master's degree students attending a distance-learning course, that creating an online community failed as the initial blogging activity was met with limited success and resulted in many students blogging for themselves or just giving up. These findings indeed challenge the assumption that blogging can create a "learning community" as the students merely "used their blog simply because it was a convenient, accessible tool for making notes, storing materials and retrieving them" (Kerawalla et al., 2009:41). Kerawalla et al. concluded that educators need an empirically-grounded framework that can be used as a guide when they are considering blogging as part of their courses. Manfra and Lee (2012) completed an interesting study on the use of blogs to learn history. The results were positive, but showed limitations. Students engaged in historical analysis when they focused on a single source, but they faced greater challenges in applying historical knowledge.

Educational researchers have explored how educators adopt blogging and use it to develop their professional knowledge. Mewburn and Thomson (2013) conducted a content analysis of 100 academic blogs and found that faculty blog about academic work conditions and policy contexts, share information and provide advice which is largely aimed at higher education staff. Luehmann (2008) performed an impressive study to understand professional identity development by following a school teacher for an entire year. The teacher used blogging as part of her practice, and found that the success of blogging is determined by the extent of the benefits one derives from the practice. Lai and Chen (2011) studied the factors influencing secondary school teachers' adoption of teaching blogs, finding that such factors were: perceived

enjoyment, codification effort, compatibility, perceived ease of use, personal innovativeness, enjoyment in helping others, school support, and perceived usefulness. Hou et al. (2010) performed a content analysis of blog entries to determine if teachers used blogging for knowledge sharing to enhance their work. They found that many teachers did not use blogs for professional development, but shared knowledge about private topics like family and hobbies. This led them to conclude that professional knowledge sharing among teachers by means of blogging is low.

Studies of wikis in educational research

Educational researchers have explored educational use of wikis, generating a substantial number of case studies. This research stream appears to have reached similar findings to those identified in research on blogs. Educational researchers are prone to designing theoretical socio-cultural technical frameworks or pedagogical models, which explain how wiki features can be integrated into practical educational designs and create learning environments. In fact, educational researchers seem to agree that having a perception of a knowledge production model is an essential precondition for successful wiki adoption. Pifarré and Kleine Staarman (2011) argue for including a dialogic perspective where students are guided towards each other's perspectives to co-construct knowledge when using wikis in a classroom setting. Baltzersen (2010) suggested the term "radical transparency", implying that wikis have to be embedded in a "global learning environment" and not only used in the conditions set by working assignments and classroom settings. Ravid et al. (2008) argued for so-called "wikibooks" as a means to empower students and teach them collaborative learning. Considering early research on wiki, however, Bold (2006) found that students adopted wikis quickly and concluded that they could be used to support cooperative learning. Bower et al. (2006) performed a research project investigating the deployment of wikis in a computer science course. Bower et al. gave a more nuanced picture, showing that students were not proficient in wiki use. The students perceived wiki work as time consuming, but were motivated to reflect and collaborate with their peers. Yukawa (2006), by following two graduate students, demonstrated how wikis could be embedded into a learning process to stimulate co-reflection. By using narrative analysis, Yukawa demonstrated how the two students formed a critical thinking process and used that to gain greater understanding of their role performance and learning situation, and discovered new ways to solve their problems.

In later research, the collaborative aspects of wikis have been pursued in great detail in many studies, creating a red thread. Research has attempted to determine the perceived benefits and what factors make wikis useful in formal learning. This means having a focus on what type of affordances wiki use can bring. Varga-Atkins et al. (2010) found that undergraduate medical students could develop their professionalism, as wiki use contributed to increased positive group dynamics and a willingness among students to reflect upon their role as future doctors. Varga-Atkins et al. argue that wiki had two benefits: acting as a shared knowledge base for hard-to-find resources on professionalism and posting of online resources was a trigger factor to create a sense of professionalism. Pifarré and Fisher (2011) claimed that a wiki learning environment can facilitate and support students' use of composition and revision strategies and contribute to enlarging young writers' writing experiences. Tsai et al. (2011) claim that knowledge base, motivation, research, social aspects, presentation, and feedback and support are vital conditions that can contribute to successful wiki adoption. And when they are combined, Tsai et al. found that this approach enabled undergraduate students to produce original and innovative concepts. Laru et al. (2012) tested a variety of social media software tools and face-to-face activities in a small study and concluded that wiki usage is the best predictor of creating good learning outcomes. Guo and Stevens (2011) argue that students' prior

expertise with wikis and teachers' attitudes will influence to what extent wiki is seen as useful and is adopted, aspects found in Robertson's (2008) study. Su and Beaumont (2010) bring another crucial insights, emphasizing that students have to be motivated to *learn* to use a wiki and learn to *collaborate*. Su and Beaumont found that students at first were reluctant to comment on each others' work in a course wiki, but after they had participated for a while at the end of their course: "87% of the students had made comments on other students' pages and the proportion who expressed confidence in giving and receiving criticism had improved by 25%" (2010:427). This finding is consistent with Huang and Nakazawa's (2010) work, but they warn that students must be guided throughout the entire learning process, as students might not be used to wikis.

There are studies reporting on failed educational wikis, indicating the importance of teacher intervention which is still a crucial factor for successful wiki adoption. Moreover, they tell us that students can be reluctant to engage online. Ebner et al. (2008) tried to determine how much students were willing to collaborate in a university course, when the students were neither enforced to contribute nor directly rewarded for their online efforts. Ebner et al. found that *not one* of the 287 students created new articles or edited existing wiki pages during a *whole* semester. Cole demonstrated similar findings, noting that after: "5 weeks (halfway through the teaching term) there had been zero posts to the wiki." (2009:144), leading Cole to conclude that in order to have successful wiki adoption some degree of instructional scaffolding is required. Karasavvidis (2010) identified a number of factors explaining why students struggled with using wikis in a related study on resistance to wiki usage among students: tasks can take up too much time and energy; creating wiki pages and contributing to others is too overwhelming; copy and paste strategies emerge and become commonplace; implicit competition amongst students undermined the idea of collaboration; and students can hesitate to edit wiki pages as they do not want to "mess with the texts" created by others. Naismith et al. (2011) found that students struggle with the technical aspects of using wikis and that they not always manage to organize themselves to initiate a collaborative process. O'Bannon et al. (2013) reported in a study of 78 pre-service teachers that students rarely had experience with using wikis outside of using Wikipedia. His study demonstrated that students were uncomfortable with using wikis, and did not regularly read, post, or modify information, apart from moderating aspects of grammar and aesthetics on a course wiki. Allwardt (2011) describes the same tendency, in a study where students were to use a wiki to collaboratively write a literature review of current research within a given topic. Allwardt find that the students expressed negative responses toward the assignment and were reluctant to use the wiki, but they also criticized wiki writing as time-consuming and they had difficulties in coordinating group work.

These insights give important understandings on the extent to which students approach wikis from an individualistic approach, and cooperate or collaborate, a theme running through the latest research. In other words, do students collaborate or only appear to be doing so? Here, the research is contradictory and provides many nuances. Hadjerrouit (2014a, 2014b) systematically measured this aspect, claiming that student teachers' wiki practices are apt to represent *cooperation* rather than *collaboration*. Hadjerrouit showed that students tend to work on individual sections of a wiki rather than revise each other's contributions. Bradley et al. (2010) explored the same aspects, finding differences in patterns of interaction and the nature of feedback, indicating that students are more orientated toward cooperation than collaboration and that students' feedback on each other's work consists of critique of grammatical errors rather than performing constructive commenting. Ruth and Houghton (2009) argue that students demonstrated the capacity to collaborate and reflect upon entries in a course wiki. Roussinos and Jimoyiannis (2013) researched the types of roles students take on when they

participate in collaborative learning and writing activities. In this study, students were organized into groups and Roussinos and Jimoyiannis investigated the types of roles they took on in wiki writing, finding four different roles: (1) *leaders*, students who lead discussions, content creation and collaboration, post ideas, trigger and facilitate dialogue, influence and support other members; (2) *moderators*, students who are good contributors with a significant number of page edits and postings; (3) *peripheral members*, students who contribute with marginal contributions with few page edits and postings; and (4) *lurkers*, students who are not visible at all. Researchers have explored if students are willing to give and receive feedback from peers. Peled et al. (2014) established in a study of student teachers that they were reluctant to give and receive feedback. Here there was a gender divide, as female students were more reluctant than males. This latter condition has been contradicted in other studies, which show that females in fact contribute and edit wiki pages more than males (Page & Reynolds, 2015). Early studies found tendencies for students to decide to decouple from course wikis and to work individually (Elgort, Smith, & Toland, 2008) or be reluctant to share not “finished” work, as this can be seen as threatening (Carr, Morrison, Cox, & Deacon, 2007). Researchers have attempted to stimulate students’ engagement by designing wiki features enabling them to work in a single document. Wichmann and Rummel (2013) designed “collaboration scripts” and performed a quasi-experiment where one group of students used the “collaboration script” while another did not. They found that students in the scripted condition outperformed students in the unscripted condition with respect to revision behavior and text coherence.

There are cases where researchers have attempted to determine if wiki usage can give tangible learning outcomes. Neumann and Hood (2009) performed a study in a course on statistics that was intended to promote collaborative learning. They split a class in two groups, where the first group of students analyzed a dataset and wrote a report by using a wiki, while the other class wrote individual reports. Neumann and Hood found that both approaches enhanced student writing and did not produce large difference in grades, but the wiki approach produced a higher degree of student engagement, findings confirmed in similar studies (Biasutti, 2011; Biasutti & El-Deghaidy, 2012). Dymoke and Hughes (2009) claim that wiki use improved writing skills, which they illustrated through poetry writing in English. Dymoke and Hughes found that pre-service students’ use of a course wiki suggested contributing to write poetry in a variety of poetic forms, to gain confidence in writing poetry and to reflect on themselves as writers, leading the researchers to conclude that wiki can be used to develop professional identity. Freire and Li (2014) performed a study over two semesters in which they asked students to submit their work on what they called a “classroom wiki”, a course that also had the intention of improving students’ writing skills. The results are claimed to have enhanced the students’ writing skills, as the students managed to produce more balanced discussions of relevant issues and include a greater number of primary sources in their writings, findings corroborated in other studies (Miyazoe & Anderson, 2010).

Tentative conclusions from research on social media in educational research

What tentative conclusions can we draw from the examined research stream? First, educational research on social media extensively and clearly documents that there is still a way to go before we can portray students as sufficiently digitally skilled and self-organized to use social media to perform formal learning activities. This means that the idea of adolescents as “digital natives” (Prensky, 2011) is a popular myth more than a certifiable reality, as many studies prove that students are not that experienced in being content-producers or used to engaging in various forms of online engagements. Second, the research stream tells us that educational researchers are experimenting and making initial experiences on basic use and practices of social media, which leads to many unanswered research questions. Third, the research reports, surprisingly,

that audiovisual technology and online contents can have positive learning effects – greatest strength lies in that it can simplify the learning process and make the dissemination of formal learning more comprehensible for learners. Fourth, educational researchers are strongly divided on the question whether social media can contribute to improve learning; one camp disputes if social media brings change to learning, while the other camp claims that participation in online communities brings benefits and can make a difference to learning and for learners. And fifth, current research teaches us that online engagement and sharing among students and teachers is also a great challenge.

3.4 Summary

This chapter established the research perspective and was outlined over the chapter's four parts. The first part framed an initial argument aimed at positioning the dissertation in relation to a research tradition. I showed that the organization studies community urged scholars to study the role of technologies in organizations to fill a pressing research knowledge gap, which also included social media. I explored current definitions of social media and a crossing research trajectory, before I discussed how particular conditions associated with social media suggested that we can use bottom-up and top-down perspectives to understand how social media is adopted and implemented into organizations. The second part outlined the study's theoretical foundation. I addressed important research perspectives on how organization studies have addressed the role of technologies in organizations, especially how organization researchers have begun to pay attention to theorizing the implications of social media on organizational life. I extracted and introduced key concepts from that research discussion to form my research perspective and linked them to the study's four models. The third part outlined the study's relevant research horizon, which I limited to two research streams. I described empirical findings produced by organization researchers on the use of social media in organizations. I also looked at how educational researchers have examined the use of the same technology in education systems for learning purposes.

4 The Shadow Student Learning Ecology

Since the 2000s, Norwegian students and teachers attending high schools have been equipped with laptops with access to the Internet. The laptops are intended to follow the students throughout their studies and are to be used across subjects and study programs. But teachers soon experience that such measures do not meet with the expected outcomes, as they see that students indulge in the social and leisure activities offered by the social media universe. They observe that students groom and game on SNSs or surf the Internet, which happens too often *in* the classroom. Such practices cause commotions and disputes over the intention of having technology condensed learning environments. Teachers respond by arguing that the students' social media activities are distractions, claiming that they result in obstructing the formal learning they are attempting to initiate. This means that student social media uses and literacy practices are evaluated as contradictory with institutional and educational views on technology and learning. And to regain control, many high schools with laptop initiatives attempt to control students' social media use by installing filters on social media and by enforcing local and self-developed policies.

To show the other side of this situation, the chapter uses a bottom-up perspective to describe a case story showing how a group of high school students take the initiative and use social media to organize formal and informal learning activities.⁷ The students in the sample were attending their first or last year in a high school with a laptop initiative, which also had implemented a technical filter preventing the use of Facebook, a high school I call the Alfa Organization. The outcome of the various ways the students use social media to organize formal and informal learning activities emerges holistically into a local form of organizing, resembling an autonomous learning ecology that is an off-limits site for teachers. This local organizing or model I call *the shadow student learning ecology*, illustrating how social media embeds and constitutes into an educational context by actions performed by the dissertation's first actor.. The shadow student learning ecology is my attempt to take a learner's perspective on how students use social media to organize learning activities.

To show this argument, I outline it over the chapter's three parts. The first part relates my model to educational research, which has developed perspectives on students' use of technology and learning. The second part describes the background behind the educational measures of providing students with laptops. The third part explains the Alfa Organization and the students' experiences in using social media and shows how students take initiatives to organize their learning activities. The last part summarizes the chapter.

4.1 Part I: Barron's *learning ecology* and Siemens's *connectivism*

To frame *the shadow student learning ecology*, I look to recent theoretical streams in educational research for analytical inspiration, work that has explored perspectives on students' use of technology and learning.⁸ I take interest in parts of Barron's (2006) *learning ecology perspective* and aspects discussed in Siemens's (2005) new learning theory, *connectivism*.

⁷ By *formal learning* I mean to what extent a goal-driven learning activity is initiated by an educational authority, while *informal learning* is a goal-driven learning activity initiated by the learner him- or herself.

⁸ This chapter's research perspective is explained in Chapter 3. The chapter expands and combines analysis I have performed in other published work (Haugsbakken, 2014a; 2014b; 2014c).

Over the years, Barron (2006) has conducted research showing that students take the initiative to pursue learning opportunities, reflecting aspects of interest and self-sustained learning. Barron's work demonstrates that learning occurs over distributed and multiple settings and by using many types of resources, both in and out of school, which students use to develop their fluency in technology (Barron, 2004; Barron, Martin, & Roberts, 2006). Such insights lead Barron to call for a new research agenda where the aim is to challenge school-centered notions of learning. Educational researchers tend to have a limited time frame and often use the classroom as research site to understand learning, according to Barron. This represents a narrow perspective and sees learning as isolated incidents, resulting in cutting off larger *contexts* that might play a role in a knowledge production process, for example, learning can link to interdependent activities being embedded in different contexts. And by clinging to it, one can miss important aspects that might play a part in a learner's life. Therefore, Barron calls for up-scaling current measurement parameters and develops a learning ecology perspective, which is to embrace a more holistic framework to understand learning.

Barron defines learning ecology as: "the set of contexts found in physical or virtual spaces that provide opportunities for learning" (Barron, 2006:195). Barron finds additional inspiration in a learning ecology framework (Bronfenbrenner, 1979; Cole, 1996; Lerner, 1991; Lewin & Cartwright, 1951; Rogoff, 2003) and combines that with sociocultural, activity (Cole, 1996; Engeström, 1987; Greeno, 1998; Rogoff, 2003; Vygotskij, 1978) and situative learning theories (Lave & Wenger, 1991). A learning ecology framework argues that learning can be shaped by the result of micro-interactional processes across short time frames within contexts and across settings, while sociocultural, activity and situative learning theories put focus on how learning can arise from micro-interactional processes in distinct communities and be linked to individual processes. These perspectives can be applied to understand how adolescents pursue and organize self-initiated learning activities. Furthermore, they give insights into the interdependent contexts where this occurs, thereby giving a *holistic* view of learning. But to take that path has implications, as it would challenge the instituted boundary between learning *in* and *out* of school, meaning that students' learning activities outside school contexts would have to be given acceptance. Barron emphasizes that researchers have wide knowledge on how students learn outside school, but it is unclear how they "migrate" between self-initiated learning activities embedded in different contexts and how this shapes their interaction in them. This factor requires the development of a framework that can lead to understanding on how learning outside school relates to learning within school and how learning in school can lead to learning activities outside school. Barron suggests following how a learner will make use of and combine multiple contexts and resources to pursue learning activities. The research objective is then to see how a learner uses the "flow" running between the varieties of contexts in which he or she interacts. Moreover, it must be recognized that a learner's interaction will take place over a longer time frame.

The analytical key linking and leading to a holistic view is to *cross the boundaries* separating the interdependent contexts where students create learning opportunities. Furthermore, it is important to consider the *mise-en-scène* of the dynamics that embody them. This involves accepting a number of features, according to Barron (2006): that adolescents are simultaneously involved in many settings; that they are active in creating contexts for themselves within and across settings; that learning processes involve the creation of activity contexts in a new setting or the pursuit of learning is found outside the primary learning setting. One should recognize that a variety of informal or out-of-school learning literacies, practices, and forms of knowledge are developed and employed; that boundaries between potential learning contexts are permeable and overlapping and that one actively uses them; and that learning can be intertwined with processes of identity construction and be part of remote learning events.

Barron's next step is to identify students' self-initiated knowledge building strategies and the ways they create learning situations. Barron suggests three conjectures to capture these. The first step consists of focusing on how "within any life space, a variety of ideational resources can spark and sustain interest in learning" (2006:200). Barron pinpoints the usefulness of portraying the "pathways of participation and to provide an account of the kinds of events, activities and processes that spark interest in learning" (ibid.). The second step proposes that "people not only choose but also develop and create learning opportunities for themselves once they are interested, assuming they have time, freedom and resources to learn" (ibid.). Barron stresses the importance of mapping the variety of informal learning strategies, which a learner adopts into his or her knowledge production process. The third step is framing "interested-driven learning activities [that] are boundary-crossing and self-sustaining" (ibid.:201). This implies a researcher should have a long-term approach and realize that learning activities transcend settings and are developed and formed in various contexts. For example, it would be important to chart how a learner first develops an interest for a topic in school and how it is pursued in other contexts. The objective is to outline changes in a person's learning ecology. The combination of this means recognizing the environment in which a learner interacts and that he or she can equally grow from it. Barron illustrates her perspective by synthesizing three different personal case stories on how students pursue and create personal learning strategies. Their common denominator is three different paths for developing pursuits of learning outside school. To learn using a technology, students pick their interest by either starting in the home sphere or in a school context and draw on various resources to harness it further. Barron identifies various knowledge acquisition strategies students employ, like finding text-based information, creating web sites, exploring various media, finding means to have structure learning, and building personal learning networks.

Siemens (2005) introduced a new learning theory for the digital age, *connectivism*. Siemens defines connectivism as "the integration of principles explored by chaos, network, and complexity and self-organization theories" (2005). Connectivism is an alternative to established learning theories like behaviorism, cognitivism, and constructivism. Connectivism is an attempt to develop a learning theory that embeds learning and knowledge production with network theory fitted for the network society. New conditions require new learning theory, as it puts more focus on the limitations in established theories and changes in conditions for how students learn and educators work. Siemens's main claim rests on challenging how earlier models rested on the assumption that learning took place *in the individual*, a factor preventing one from seeing how learning happens outside people's domains. This entailed that external conditions in society and information stored in technology are overlooked in the learning process, a factor that can lead to prevent teaching students the capacity to evaluate the quality of information. Connectivism attempts to stress that learning and a shifting and complex environment beyond the individual's domain is important mastering. When the learner and educator interact in a network society where information is abundant and changing, this requires adjustments in how learning is recognized. The learning process needs now to focus on "connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing" (ibid.). In essence, connectivism states that learning occurs when learners are able to "form connections between sources of information, and thereby create useful information patterns" (ibid.) and to evaluate them critically.

Two aspects in Siemens' work are of particular interest to me: *learning as connections of nodes* and *self-organization*. "Learning as connections of nodes" implies that learning happens when a learner manages making pre-established connections when *nodes* are activated in a network, regardless if this involves sending, receiving or forwarding of information. As Downes puts it: "to 'know' something is to be organized in a certain way, to exhibit patterns of connectivity.

To ‘learn’ is to acquire certain patterns/” (2006). A node can be defined as a knot or a point of interaction. Siemens (2005) theorizes that identifying and managing the links between nodes, eventually what they mean and how they can be used to create something, is important to master in learning processes. This is important when the premise for which the context the learner interacts in is now complex and chaotic. Such appears having reversed the conditions from which information is to be retrieved and changed into knowledge. As it is now ongoing, distributed and abundant, this requires one to critically find nodes and connect and make sense of them. The flipside to this is that the learner’s capacity to be self-organized is vital to the learning process. Siemens defines self-organization as “the capacity to form connections between sources of information, and thereby create useful information patterns” from random initial conditions (2005). This means that it is not simply enough to demonstrate the ability to link nodes, but also that a learner and educator have to enact them as well. Self-organization is imperative as nodes can take on a variety of literacies, but also that one has to account for aspects like curiosity, creativity and randomness, and connections, which are imperative to explain aspects of social media use among students.

In sum, to “import” aspects from Barron’s and Siemens’s theorizing into the local model, the shadow student learning ecology concerns to develop and embrace a holistic perspective on formal and informal learning, which is based on premises that students create from the social interaction transpiring from situations in which they are involved. Moreover, this contends with recognizing that students can create and pursue learning activities across changing interdependent contexts and perform various knowledge acquisition strategies and connect and make sense of pieces of information to form knowledge. An important aspect is to investigate what “happens” in the autonomous space, off-limits for teachers, the students have created when they organize formal and informal learning by use of social media. Do they create learning situations where they willingly engage in new social media contexts to find new information or resources or do they remain in the situations where they are? Do students cross contextual *boundaries* to create learning opportunities, like harvesting knowledge and resources from a school context and then move further to learn more about something in the home sphere and vice versa? Or do they settle for developing and performing knowledge strategies in a single context? Another aspect concerns understanding to what extent students are self-organized and are able to relate to established and new connections to perform knowledge acquisition strategies. These aspects are explored in the forthcoming subsection.

4.2 Part II: The laptop initiative

Since the 2000s, Norwegian County Authorities (CAs), which are responsible for high schools and are responsible for administering and implementing educational policies regionally, have introduced laptops to students and teachers and installed wireless networks in their high schools. This has happened on an institutional scale across the country. The aim is to achieve full PC coverage. The laptops initiative often has a top-down framing and is imposed on students and teachers. This has meant that many high schools have changed into technology condensed organizations, implying similarity with any other organizations using ICT as part of their working day. There are overlapping reasons for the laptop initiative. Some form part of local discourses on developing public organizations, while others are required to be implemented, as they are “pushed down” in the hierarchy from national authorities. They are part of combined educational goals, like promoting equality in education, preventing digital divides, enhancing digital competences, and securing that the digital development in society at large is reflected in the K-12 system. The goals can be seen as the fulfillment of intentions set in the recent national education reform of the Norwegian K-12 education system.

There are variations in how the CAs organize the implementation of the laptop initiative. This is influenced by the degree of local autonomy they possess. The laptop initiative is legitimized by decisions approved in the CA's political body, the County Council. One of its greatest consequences is that the CAs have become "industrial consumers" of laptops, tablets and computer hardware. They have signed contracts with retailers after public procurements involving large investments of millions of kroner. The CAs' IT departments often take on the role of chief internal coordinator and cooperate with the high schools to implement the laptop initiative. A recurring theme is the *gradual* deployment of laptops, meaning that some high schools have been part of a separate pilot before the remaining schools are included. Some have been "test schools" and used laptops for a year or so. In other cases, there might only be one or two classes in a study program at a high school that have laptops. But the most common situation is that when students arrive on their first day at high school, they are provided with laptops that are intended to follow them throughout their education. One can also observe that the laptops initiative has an impact on the high schools themselves. The high schools have new IT infrastructure, involving the creation of new responsibilities, routines, and positions. Previously it was common that scant resources were allocated to administer computers. This has been reversed. The high schools have local IT departments with technicians who look after the computer network, oversee technical maintenance, install updates, and carry out administrative tasks, etc.

There are differences in the practical arrangements as to how students are equipped with laptops. This has been enabled by economic arrangements like deductibles, stipends, loans, leasing agreements, etc. Students pay a standardized fee, which is later reimbursed. And when they finish their education, they can choose to return their laptop or buy it. This arrangement implies that the initiative has structural and top-down orientated guidelines, forming a control regime for the use of computers. These are epitomized in a body of rules and licenses, which users are required to follow and accept when they acquire their laptop. The CAs buy standardized education licenses from software suppliers for operating systems and office suite software, for example, which only can be activated by license codes given to the students. The CAs introduce a range of documents that specify rights and duties on both parties. The CA gives the right to students to use its computer networks and to receive software updates. Students are required to sign an agreement, which often states that the laptop is the legal property of the CA. The CAs appear to vary on the extent to which they allow students to use private laptops on their computer networks. Students are required to familiarize themselves with a particular CA-designed ICT protocol, which can serve to sanction illicit activities. This has to be signed by the student and one of their parents, if the student is under 18 years old. It is common for CAs to impose their own intention for use, which is often prone to stressing that laptops are to be used to promote good teamwork, order, and work habits. They also state that they should contribute to a stable and secure operating environment and encourage a good learning and working environment for the students. Besides this, the CAs test tablets, either in selected classes or sometimes as entire schools. This is not part of the laptop initiative, but is realized as a series of separate ongoing R&D projects. Here, the intention is to investigate whether tablets can improve learning, enhance student motivation, and create an interesting school day, which can help to design better future digital classrooms. The CAs often collaborate with researchers to establish the effects of such R&D work.

The laptop initiative has conflicting effects, evoking powerful discourses on the complex relationships between technology and learning in education. This deals foremost with challenging established beliefs, logics, educational practices, and institutional control regimes, but also disputing expectations on technology's potential limitations or possibilities on learning. The laptop initiative is not exempt from public debate and creates polarized views. There are

often divides between so-called technology “enthusiasts” and “skeptics” who criticize each others’ views. Educational authors have criticized the initiative as misplaced, claiming that it does not represent the best way to educate adolescents to become independent thinkers. Within the education system, many “best practice conferences” have been organized throughout the country, where successful teachers and high schools have been celebrated as symbols on how to work digitally. Top public administration officials argue that teachers need to embrace the digital era, while the teachers remain skeptical. But the thorniest issue, raising much concern, is how the laptop initiative has given students direct access to the Internet. This is observable in classrooms, causing accusations of obstruction of learning. After the steep take-off curve of social media in the 2000s, young people’s social and leisure activities have been brought closer to the high school. This is epitomized in the image of students glued to their laptops, which has spurred stories on personal frustration. Teachers contend for an imbalance in the learning situation and are fast ‘to recall their experiences’. Classrooms full of laptops turn the students’ attention *away* from what happens *in front of the class* to what happens *in front of the screen*. Teachers have experienced feeling powerless, as they observe that students *game* and *socialize* on Facebook rather than paying attention to what they say to them. To regain control, teachers have petitioned about their vexation to school managers, who in turn have accepted and implemented social or technical sanctions. The most common means is to install filters so that social media applications cannot be accessed from the school’s computer network. Other schools go further. At certain high schools, having first introduced laptops, they have later locked them away and returned to using textbooks. Despite this, the enforcement of bans on social media is futile. Students bypass constraints by using the strengths in the hardware and the software with which the authorities have flooded their schools. They use other Web 2.0 applications, install temporary proxies, or use other computer networks and their cell phones, which allow students to continue communicating. In most cases, however, the students do respect and understand bans.

There is great uncertainty as to the consequences of the laptop initiative for learning and student performance. National press coverage reports different experiences. There are high schools that have successfully adapted to the new situation and organize pedagogical practices around laptops to meet the expectations of the digital age. We find cases of motivated teachers and students who find the new technology useful. On the other hand, many stories tell about aborted pilot projects. Teachers and students report that they spend more time on learning how to operate tablets than focusing on the subject they are set to study. This means that the actual learning process is more about learning to use a technology than using the technology to facilitate better learning.

Research is a scarce commodity and we are forced look beyond Norway to other Scandinavian countries for evidence. Here, research has shown that Danish students’ use of tablets can create negative effects on learning (DR, 2013). In the Norwegian context, our current research horizon is limited to a growing number of case studies, which have explored the relationships between laptops, iPad and social media from teacher and student perspectives. This is reflected in a growing body of master’s degree theses that have explored specific themes. These studies have discussed social media’s potential theoretical implications for pedagogical and didactic practices and its challenges for digital competences (Eide & Weltzien, 2013; Lykkenborg, 2010; Moe, 2011; Ottesen, 2014), the concrete strategies students use to manage their online identity on Facebook (Ruud, 2011), how social media can be integrated into students’ studies (Haga, 2013), and how students use social media as a mean to escape the education system’s academic culture (Meijers, 2013). Besides this research, the Monitor surveys of the K-12 system (Hatlevik, Egeberg, Guðmundsdóttir, Loftsgarden, & Loi, 2013) give a more cohesive picture of students’ use of social media, which is concluded to belong to the leisure sphere. The latest

Monitor survey from 2013 finds that few students use social media for formal learning; only 7 to 10 percent are said to use Facebook to organize formal schoolwork. But the interesting research question worth documenting is to find out what is really going on *in* the classroom. For example, what are the students doing behind their laptops when their teacher presents new learning material?; a situation many talk about but have not been privy to observe first-hand from a research perspective. In this regard, Blikstad-Balas' study is pioneering. She monitored how a class of students used their laptops during a teacher presentation, at a high school in Oslo. Her conclusions are not promising:

The respondents all explicitly state that they do not pay attention to most of these presentations, sometimes they do not even try to. They all have their computers on during most of the presentations, and they actively go online and search for other texts on a regular basis. The recordings show that this is not the case only for the four respondents chosen to record their own activities, but for the class as a whole. (Blikstad-Balas, 2012:90-91).

Other studies report the same tendencies as Blikstad-Balas (Lindroth, 2012; Skaar, 2011).

4.3 Part III: The shadow student learning ecology “in action”

4.3.1 The Alfa Organization or high school

The Alfa Organization or high school is located in a suburb of a city in Norway. Approximately 1300 students attend the school and it has 200 teachers. Students are recruited from the surrounding suburbs and from more distant municipalities. The high school has vocational and general study programs and offers eight different study programs. In vocational studies, students can choose between service industry, technique and industrial production, media, design, and construction. Vocational training follows a “2+2” education model. Students spend their first two years in school acquiring introductory knowledge, followed by two years in apprenticeship training. The high school has three academic programs, general studies, dance, music and theater, and sports. This follows a three-year education loop preparing for university studies. Student demographics show even distribution among the sexes. The choice of study programs is gendered. In construction, for example, a male dominated profession, one can find classes only consisting of males, but in academic studies there is an even gender distribution.

Since 2010, the high school has been part of a laptop initiative which includes all the high schools in the county where the Alfa Organization is geographically located. The laptop initiative requires that all students and teachers have a laptop each and are connected to the Internet. The laptops are provided by the CA and are part of the high school's priority area, digital literacy. The high school has become a rather large IT organization with many laptops and wi-fi transmitters, a technology infrastructure that has to be maintained by a local IT department. The IT department controls and has the operating responsibilities for more than 1500 individual user accounts and laptops. The IT department employs three full-time technicians and student apprentices studying the technical side of ICT. The IT department has expanded its activities in recent years. The IT staff carries out the daily maintenance of the high school's computer network, attempts to keep up to date on new regulations and recent software and hardware, registers defective laptops, etc. But this work has changed too. The technicians are less involved in technical ICT work, but work more with administrating and reporting to officials. The IT department can shut down the local IT network when required. There is currently a filter on Facebook, which was installed in 2011. This came at the request of teachers, who experienced that students socialized on Facebook rather than paying attention to classroom

activities. The teachers are divided on the Facebook filter. The IT department gets requests from teachers to reopen access to Facebook, but has not yet complied with it.

4.3.2 The social media behavior of the students

The students who participated in the shadow student learning ecology are listed in Table 4.1. The students were recruited from two classes during the school year 2011/12, mainly from two classes of the teacher that will be discussed in the next chapter. The data sample consists of 26 students: 17 males and 9 females. Informants 1 to 11 attended a vocational study program in construction and were studying to become carpenters. They followed the 2+2 education model and were finishing off their last year in the introductory knowledge training course and waiting to begin their apprenticeship training in a company. They were 17 to 18 years old. Informants 12 to 26 attended the general/academic study program, which lasts three years. They had just started their high school education and came directly from the junior high school system. They were 16 years old and intended to enter university or college at the completion of their high school studies.

Table 4.1. Data sample of students and their use of social media applications.

Informant no.	Gender	Age	Study program	Subject	Level in school	Approx. Facebook Friends	Member school FB-group	Active bloggers	Skype to share school work	Use YouTube Videos	Google Docs
1.	M	17	Vocational	English	2 nd year	900	-	-	Y	Y	-
2.	M	17	Vocational	English	2 nd year	600	-	-	Y	Y	-
3.	M	17	Vocational	English	2 nd year	350	-	-	-	-	-
4.	M	17	Vocational	English	2 nd year	50	-	-	-	-	-
5.	M	17	Vocational	English	2 nd year	-	-	-	-	-	-
6.	M	17	Vocational	English	2 nd year	800	-	-	-	Y	-
7.	M	17	Vocational	English	2 nd year	-	-	-	-	-	-
8.	M	17	Vocational	English	2 nd year	-	-	-	-	-	-
9.	M	17	Vocational	English	2 nd year	400	-	-	-	-	-
10.	M	17	Vocational	English	2 nd year	-	-	-	-	-	-
11.	M	17	Vocational	English	2 nd year	300	-	-	-	Y	-
12.	M	16	General	Spanish	1 st year	600	-	-	Y	Y	-
13.	M	16	General	Spanish	1 st year	700	-	-	Y	-	-
14.	M	16	General	Spanish	1 st year	-	-	-	Y	-	-
15.	F	16	General	Spanish	1 st year	1000	Y	Y	-	Y	Y
16.	F	16	General	Spanish	1 st year	300	Y	Y	-	Y	Y
17.	F	16	General	Spanish	1 st year	700	-	-	-	-	-
18.	F	16	General	Spanish	1 st year	400	-	-	-	-	-
19.	F	16	General	Spanish	1 st year	800	-	-	-	-	-
20.	F	16	General	Spanish	1 st year	1000	-	-	-	-	-
21.	M	16	General	Spanish	1 st year	700	Y	-	-	-	-
22.	M	16	General	Spanish	1 st year	-	-	-	-	-	-
23.	M	16	General	Spanish	1 st year	200	Y	-	-	-	-
24.	F	16	General	Spanish	1 st year	200	Y	-	-	Y	-
25.	F	16	General	Spanish	1 st year	200	Y	-	-	Y	-
26.	F	16	General	Spanish	1 st year	300	Y	Y	-	-	-

The students had personal strategies on how they presented and managed their online selves. Many students appeared to be digitally present and passive observers of social media's participatory web culture. They presented themselves as *passive Web 1.0* than rather *active Web 2.0 users*. They had a more "read-only" than "read-and-write" approach to social media, implying little evidence of prosumer activities. But their social media user behavior showed traits of complexity and performance of strict personal policies on self-censorship. The students were cautious in how they interacted and connected with new people. This often led to a dual communication practices. On the one hand, they preferred to communicate in private digital spaces with strong ties from the off-line world by use of chat software, while on the other hand they passively monitored the larger public dialogue in their social streams. Besides that, it appeared *not* to be common for them to connect with new online ties, implying that they would normally communicate and connect with trusted and close friends they knew from the off-line world. User privacy was a cherished value and to publish online content randomly was a great threshold. They did not regularly share or create online content. The students were conscious that an ambiguous audience could potentially exploit them. They were mindful and aware of cyber-bulling, implying that creation of online content was associated with risk, although many did not mind that their names could be googled or were searchable on various search engines. The students exercised rigorous ideas on what type of content they could publish. This also applied to students who were not regular contributors of content. Few students were active web content creators; the majority of the students mainly traversed web pages to retrieve information rather than actively producing it. Only four of the 26 students had regularly published any form of web content. Three girls had a blog and blogged regularly. One male student had published YouTube videos. Regardless of such user patterns, many students combined social media practice with e-mail and SMS and reading of online newspapers on a daily basis. The voice-over-IP service Skype was popular, meaning that chat software was surprisingly one of the main ways of communicating with people among the students.

Addressing the students' social media behavior more specifically, the students interacted on four types of platform. The students divided their online time between; (1) SNSs, (2) video-sharing communities, (3) online gaming communities, and (4) blogs. Facebook had started to play a centering, connecting, and organizing role on top of other social media platforms, acting as a type of "road" or "main social media node" linking their user behavior to other Internet sites and web practices. All the students had a user profile on Facebook and had used it since 2008. Facebook was used for online socializing and belonged to the leisure sphere. The students reported checking their Facebook user profiles every day. The students used Facebook to stay in contact with friends and family and to stay updated on what their closest friends were doing. It was common for a student to have around 300 online connections, but some could have as many as 1000. It was also common to belong to Facebook groups. But the students reported contradictory user habits. They had now started approaching Facebook from a "lurker" user type position, meaning that they were passive consumers and seldom contributed to any online dialogues by sharing of online items. They frequently communicated one-to-one in private chat channels, while they silently glanced at what others might share. But the development of this personal self-censorship appeared to be the outcome of a retrospective online socialization process. Long-term use reflected a recurring user pattern. For example, when they first started using Facebook, they engaged *deeply*, but later took a *shallow* position. This appeared to be creating normative strategies for user engagement, rendering a more critical user community belief of what ideal Facebook might be. This was reflected in distinct ideas for "correct" online participation.

A “teen Facebook etiquette” has emerged, exposing a declining popularity of Facebook among adolescents. First, Facebook was seen as “dull” and a “waste of time”. The students were disenchanted with Facebook because they perceived that “nothing happens there”, classifying the SNS as “uninteresting” and “irrelevant”. This meant that few students admitted to posting digital items to create online interactivity. The students appeared to be quitting and fleeing Facebook in favor of the microblogging service Twitter. Second, many user stories showed another recurring user pattern, illustrating personal decisions to disengage from an online community. This shows a change from being an engaged to a disengaged user, which is characterized by the students ceasing to perform central Facebook practices. These made little sense to carry out and followed a distinct pattern. When the students first registered, they wrote many status updates but later that tailed off. After a while, they would only click “like” on status updates, but later they would also stop “liking” status updates, a practice ultimately leading to only being present just to look at pictures emerging from their Facebook feed. Third, this user experience involved not a complete halt in communicating with their online connections, but simply a personal transference of their communicative practices to chat channels, where they continued to interact with their friends. Fourth, informants stopped building and expanding their Facebook networks. It was rather rare to encounter students who added new connections. They were finished “faceworking” and had met a network’s “saturation point”. In contrast, when they received a friend request, they would treat it with skepticism and run “social background checks” to find out who it was and how they were related, meaning a strong degree of selection as to whom they included in and excluded from their networks. Fifth, there were several cases that illustrated that the students had now started critically questioning the value of having large online networks. They realized that they did not relate to so many people in their offline world. Consequently, the students started to decrease the number of online connections or to “unfriend” connections. A female student told me that she had reduced her Facebook network from 1000 to 300 connections. Sixth, we find the development of an odd attitude, a form of “teenage anxiety mind-set”, illustrating the social and emotional complexities in bonding and bridging strategies in social networks when humans decide to relate to each other. This reflects a perception on attitudes towards how youth choose to perform connecting strategies with weak or strong ties belonging to their own social group. Moreover, it reflects how youth evaluate the distance from ties, which others see to be part of their own social group. This is conveyed through a belief, showing how students can choose to *know of new ties*, but not *want to confirm their relationship with them*. This “teenage anxiety mind-set” acted as a justification for not engaging with new people as part of their social group. This surfaced especially when students observed that younger teenagers, “newcomers” on Facebook, attempted to include them in their online networks. The students would not favor engaging with them because of the personal intimacy and content of their status updates. Instead, this would act as a justification to leave Facebook and head toward Twitter, which was their new online playground.

The students used and engaged in various Facebook groups. They interacted mostly on closed and private Facebook groups with other users who shared the same hobbies. Many students reported that they wrote status updates, liked and commented there. The Facebook groups were used to organize and coordinate the students’ social lives. In the midst of all this, we find the emergence of a new social media practice. This shows how adolescents take the initiative to organize and embed Facebook groups into their private social lives, using Facebook groups to organize illegal taxicab operations at weekends, a social media practice that has received much public attention. Taking official taxis that charge regular fares is considered expensive, leading young adults to look for cheaper and unregulated alternatives to get home after partying on weekends. Facebook groups have started to work as a type of “unofficial” unregulated taxi call center, where contact information on potential drivers, fares, and trips is exchanged and

organized. Certain Facebook “taxi” groups have as many as 2000 members and are based in the same geographic area where the members live. News stories claim that a driver can earn 5000 kroner for a night’s work. I interviewed two male students who have engaged in this practice:

- I-2: Among my buddies, it’s a lot about football.
- I-1: A lot of football, a lot of drinking, potential parties, drivers. Very much drivers. Many updates say you can call this or that number, if you need to driver at the end of the night.
- R: Are they paid to be drivers?
- I-1: Most of them charge you. This may be 200 kroner, for example, to drive someone here and there. When I get my driver’s license, I’ll be sure to write that I can drive an evening, for example, if I’m not drinking myself, though. I’m going to write that I can drive. I might perhaps charge about 50 kroner per person. I will drive them wherever they need to go.
- R: Who do you drive?
- I-1: Friends on Facebook, for example. I post my number, and anyone can call me.
- I-2: All my friends see that it’s posted there. If they are in a place and can’t get home, they just call you and ask if you can drive them home.
- I-1: For example, and if there is anyone who knows it, among those I know on Facebook, who know that I can drive, and they go to a party and I meet other many people there, who I don’t know, they can tell them that I drive. This might give many trips.
- R: It’s a sub business that has emerged?
- I-1: Yes. It has started to compete with the general taxi business, I think. Taking a taxi is the last resort, if you can’t find a driver.
- I-2: You call through your Facebook contact list before calling for a taxi.
- I-1: I would rather walk home than taking a taxi.
- I-2: If I’m at a party somewhere, and can’t reach a driver, I just walk home. I’m not calling for a taxi.

The students interacted on other social media platforms, foremost YouTube, blogs and gaming sites, where the two latter were ascribed strong gendered values and represented a type of digital “off-limits space” for the opposite sex. Blogging was an exclusively female domain. Many male students claimed that they had never read a single blog in their entire life, as it was categorized as a “girl thing”. “Blogs are for girls”, as an informant promptly stated it in an interview. If the male students had ever visited a blog, they merely looked at the pictures. This gendered youth divide included the particular Norwegian mediated social practice or phenomenon of *rosalboggere* (pink bloggers), who over the years have emerged to become public figures or celebrities. Unclear of its cultural nature, it can be understood as an individualized young adult consumer culture lifestyle, dedicated to experimentation on feminine social identity practices, like contemporary fashion and cosmetics. Central to this practice is how young females blog about their everyday lives, emotions, love-lives, and social matters and endorse commercial products, acting as controversial role models. This online social identity has risen to become a symbolic representation of a successful adolescent, although heavily criticized for monetizing and use of female sexuality to gain public recognition. Pink blogging is connected to the web site blogg.no, which many of my female informants stated they read on a daily basis. The female students approached blogging from a consumer perspective. They read blogs by female bloggers whom they admired, but did not engage in the blogosphere as prosumers. Only three female students had their own blogs, where they blogged about their lives or posted pictures.

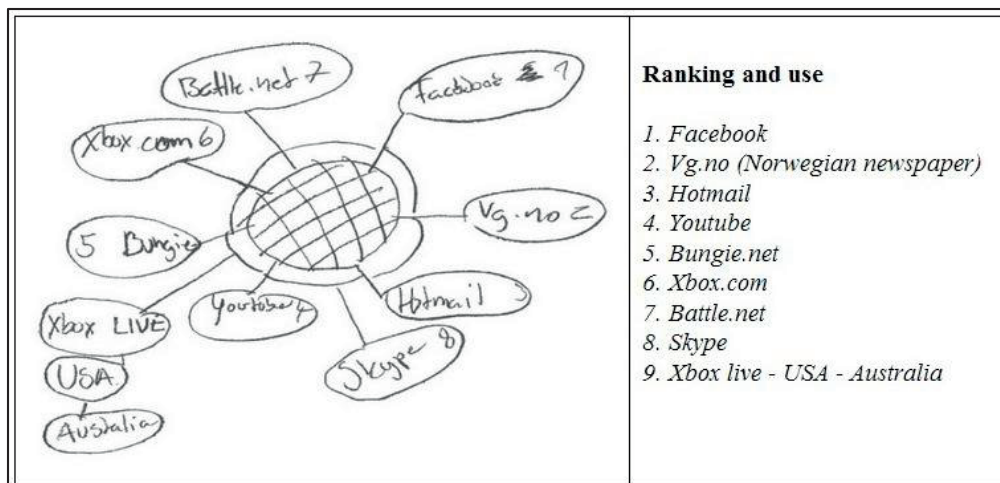
Online gaming was in stark contrast to blogging, representing a digital domain for young males. Some female students had tried gaming, but did not engage with it. The male students explained that they had gamed for years, portraying it as an important leisure practice. Gaming is a longstanding consumption activity, which could last for hours. It was a typical weekend hobby. Many male students congregated and played first-person or third-person shooter computer/video games like *Call of Duty* or *Counter Strike*. Some males were reluctant to talk about the number of hours they spent in front of a PC or videogame machine. Many male students stated they had started cutting down on gaming, as they began to see it as “dull”; and, if, a male student still spent many hours on gaming, he was now somehow considered as rather immature and needing to get a better social life.

YouTube was a favorite with both sexes, portrayed as a “neutral gendered” web space. YouTube was used for different purposes; for downloading music, just watching small video clips, and for informal learning. The students used YouTube videos to learn to play musical instruments or video games.

4.3.3 Organizing formal and informal learning

My outline of the students’ general use of social media raises questions on *how* and the particular *ways* or strategies the students use to organize and coordinate their online socializing and leisure activities. Moreover, it breeds questions on how students perform knowledge building strategies and the ways they create learning situations from use of different social media platforms. The data analysis so far shows degrees of great user complexities. We have learned that there are differences and variations in how students interact and engage in the social media universe, as illustrated in Figure 4.1. Figure 4.1 shows a self-ascribed graphic “mental node” created by a male student attending vocational studies. This can be used as a measure to frame *what* and *which* sites they normally interact on by personal ranking and keywords, a visual or graphical technique to capture a person’s Internet user behavior. Figure 4.1 indicates that the male student visits 3 to 10 sites every day, a holistic reflection on how students engage and organize their user behavior. Other mental nodes show that students combine their personal use between social media platforms with web sites under editorial control. They largely use Facebook and YouTube, but include web sites and different chat software. Many students report being *passive* or *present* and only a few engage in the social media’s participatory culture and create user-generated content. They are prone to traverse and participate *within* and *across* different social media platforms and combine that with visiting a couple of web sites, for example, rather than remaining loyal to one or two social media applications, reflecting how students strategically choose to engage on social media. This entails that students engaged across distributed and multiple settings and used many types of web resources, echoing the need for an ecology perspective.

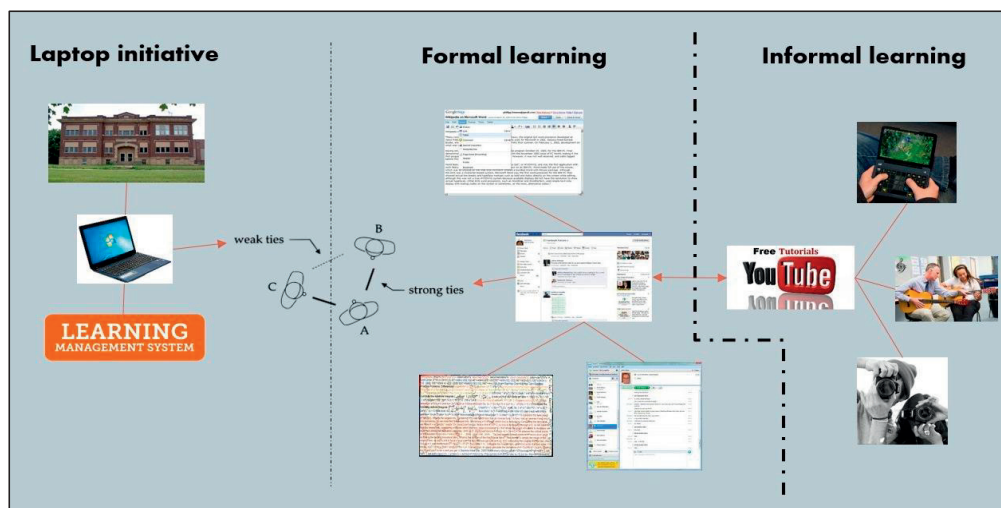
Figure 4.1 Mental node of a student from data sample.



I emphasize this point, as it has a bearing on conceptualizing how the shadow student learning ecology “works”. Instead of tracking individual user patterns connected to a single and *isolated* social media platform and see what happens there, it makes more sense to frame it another way. One must map how students use a variety of social media platforms and how they choose to engage in their embedded contexts. Moreover, we must chart if they manage to cross the instituted boundaries separating *interdependent contexts* and use and combine the resources that follow with them to organize learning activities. This aspect plays an important role in conceptualizing the holistic view on how the students pursue and organize self-initiated learning activities.

Figure 4.2 is my attempt to show a bottom-up perspective of the shadow student learning ecology. Its properties can be conceived when we see it in relation to how it contradicts institutional views and initiatives on learning and technology. The high school has equipped its students with laptops with access to the Internet and installed a technical filter on Facebook. But when the high school’s students start organizing formal and informal learning activities and create an autonomous sphere, the contours of their social media actions give the shadow student learning ecology a shape and tentative “social life”. It can temporally manifest in an organizational context at the blurred boundaries of the Alfa Organization, in its “shadows”. Facebook has a centering organizing role as the main digital resource students use to organize learning activities, which they use for constructive and non-constructive purposes. For example, 7 of the 26 students in the data sample reported using Facebook to do their studies. This trait amplifies the importance of digging deeper into how students use different social media platforms. We need to contextualize how they perform personal knowledge building strategies and why they decide to engage or remain passive. We need to emphasize how they evaluate their own uses of different social media services, furthermore, how their uses are connected to activities and the different web platforms they participate in and traverse.

Figure 4.2 Visualization of the shadow student learning ecology.



To give a picture of how the shadow student learning ecology “works”, the remaining part of the chapter is divided into two parts. The first part portrays how the students use social media to organize formal learning activities, while the second part shows the ways they organize informal learning. Each part describes how the students carry out a variety of personal knowledge building strategies.

1. Organizing of formal learning activities

The following data analysis builds on the user experiences of 12 students: seven males and five females. These are informants 1, 2, 12, 13, 14, 15, 16, 21, 23, 24, 25 and 26. Based on their user experiences, I have coded their answers into five themes.⁹ Each theme outlines how they evaluate and choose to share and organize the schoolwork given by their teachers. The first theme explores how they evaluate their online connections, reflecting a trait often seen in selection or connecting processes on SNSs. The second shows how they establish and use Facebook groups and label them as “class bulletin boards”. The third theme shows how students produce learning tools and how they decide not to share with fellow students. The fourth theme scrutinizes how students use Skype as a way to con their homework. The fifth theme tells the story of how students create Facebook groups and use them as discussion forums to complete larger project work, and moreover, how they combine their reflective experience from online discussions to co-author their submissions in Google Docs.

The careful selection of ties

The first theme characterizing the shadow student learning ecology concerns ideas and practices related to social selection and connecting strategies of connections in SNSs. How the students choose connections has implications for access to potential digital resources. Rigid inclusion and exclusion of connections into SNS and its diffuse overlap between the on-line and off-line world was a factor among the students. It suggests working as a significant precondition for participating as well as creating multiple types of digital divides between the students. These digital divides followed the lines of demographic variables like age, gender, and study program.

⁹ The way I coded the material is outlined in sub-section 2.4 in Chapter 2.

The students in vocational studies took on a rather “traditionalist role” towards using social media to organize schoolwork. The majority did not share any type of assignments with their fellow students, resulting in low prospects for cooperation. Only two male vocational students stated that they had used social media to share formal schoolwork. And if they did so, it was seldom motivated to support a learning process in a constructive way. If they shared, it happened in small online networks consisting of two or three connections, often within the limit of a one-to-one relationship. Anything that related to online use was to be done on the school’s LMS. The vocational students expressed skepticism and privacy was an issue. They had an individualized approach and considered that sharing should be performed under the strictest confidentiality, mainly off-line between student and teacher in a private physical space.

The students in general or academic studies had a different attitude and motivation. They used Facebook and Skype to organize goal-orientated learning activities. This applied to at least 10 of my informants. Yet there are user patterns showing layers of user divides and variable degree of openness. All the Facebook groups were closed, but they were created for different reasons. Some were class-based, while others were created as part of temporary school projects, implying variations in how sustainable and interactive they are. There were at least four or five groups in my data sample. None of their teachers had created the Facebook groups. Several students stated that they had been added without their consent, but started using them regularly, while others had taken the active decision to create their own Facebook groups. We regularly find the repeating pattern that some young resourceful student took the initiative to create a Facebook group and took on the role as group administrator. In other cases, we find that students who are used to engaging in several social media platforms – displaying traits of being “prosumers” – are those who are most likely to be active and use them to organize formal learning, and this seems to be predominantly female students.

The students had a clear perception that the school related Facebook groups were digital sites off-limits to teachers. As an informal rule, teachers should not be members of the Facebook groups and neither did they appear to be connected with the students on social media. Often it seems there was a *consensus* that both parties should keep their distance from each other. The students and the teachers belonged to separate social groups and did not cross boundaries. To do so could potentially put them in embarrassing situations:

- I-24: They could have written that, this was something you should have paid attention to in class. And, you have to be friends with the teacher, if they’re to be member of our Facebook group. And I don’t think that there are any who are Facebook friends with the teachers.

Facebook groups as a “class bulletin board”

The second theme in the student learning ecology concerns traits of technological reframing of Facebook groups. The students tend to reframe them to fit their formal learning activities, a user adoption defined by the digital content students share among themselves and how they classify and evaluate them. Moreover, they are ascribed meaning by the type of school work or learning activity they carry out and organize at the time. The Facebook groups are perceived and used in two general ways. First, the students classified them as “class bulletin boards”. There appeared to be at least three class-based Facebook groups in my data. The students in academic training were the main users. None of the students in vocational training reported having created any and never used them. Second, once Facebook groups are created, they require some online interactivity or traffic. On the class-based Facebook group, there is little data suggesting active

sharing, but merely that the students used them as practical digital sites to coordinate simple formal learning activities:

- R: Are you member of a Facebook group?
I-24: Yes. We have a class group. There we talk about what homework and what tests we're going to have, stuff like that.
R: Are you active in one of those? I have understood that it's not created by your teachers, but by you guys?
I-24: Yes, to remind each other that we have tests. It's very smart!
R: Is this a bulletin board or do you have discussions about assignments?
I-25: No, not about topics.
I-24: It's like that, if someone has homework, and has forgotten what pages we are supposed to read for a class, then you post, "What page we are supposed to read in science?", and then there is someone who posts an answer, if they know it.

This transcript from an interview with two female students illustrates that class-based Facebook groups are not generally used for larger reflective discussions about assignments. There are no traits suggesting that students exchange their opinions, as part of an effort to co-produce knowledge and learn more about a subject that interests them. In contrast, the class-based Facebook groups are used to "keep oneself updated" and are viewed as useful. The students post and retrieve simple practical information, which is part of their preparations for classes. They share information on what they have for homework for the next class, pages they are supposed to read for a particular lesson and for school tests:

- I-21: We have a Facebook group. When we have tests, we can share cram sheets. If there is someone who has not done their homework, then we can share, so we can talk to each other; what is our homework for the next day, what is the work for the next week. In that sense, it is very convenient.

The Facebook class groups work as a "student answering service", where online communication is minimal and characterized by the expectation of a short answer. This information exchange is a supplement to the regular reminders students do face-to-face, which perhaps is reminiscent of the old "work plan", a sheet which teachers handed out to students at the beginning of each week showing their work schedule.

Production of a learning tool – the cram sheet

The third theme illustrates a non-constructive side of the shadow student learning ecology. Until now we have considered a positive side. In other cases, this is not the case. Certain students can refuse to participate, an aspect that is especially associated with the creation and sharing of a popular student user-generated item, *the cram sheet*. Cram sheets are concise sets of study notes of compressed knowledge used for quick reference. Students use them as part of their preparations for tests and exams, as a method to memorize knowledge in any given subject they study. The practice of making them is an exercise, as learners have to perform a piece of work by themselves. Students will often turn to the Internet to retrieve them there. But there is a slight catch to that. There is an unknown quantity of cram sheets in worldwide circulation. Any student searching for one will often face a recurrent problem. The relevant and exact cram sheet covering the material for a certain test or exam can be hard to find. If they are not found, they must be made by someone:

- R: What's going on there?
- I-23: Everything about what we have in homework, when classes start, cram sheet, tests, and what the tests are about.
- R: Do the students share their schoolwork very actively there?
- I-23: Yes, a lot. It's mostly those who don't bother to study and who don't bother to do well at school, who ask if others can post cram sheets. I don't post my cram sheets there.
- R: What is a cram sheet?
- I-23: We often have a topic related to our tests. Everything that we have in a specific topic, we write down on a sheet, which is important to know. So, it's almost like a summary of what we're going to have on the next test.
- R: Is this a method that you created or developed by yourself?
- I-23: It's almost like taking notes in class, where you write what you feel is important knowing. I use cram sheets a lot. Mostly, I use them when I browse through what we have read in the textbook and write down what's important.
- R: Is this a method you learned in school?
- I-23: Yes.
- R: Are you careful about sharing cram sheets on Facebook?
- I-23: Yes, I think it's too easy. I think that they ought to figure it out by themselves and organize their own cram sheet. They only dodge work.
- R: Because you're really doing the work for them, right?
- I-23: Yes. I will not do that free work for them. I've worked hard on this and I will not just give it away.
- R: Are there many asking for cram sheets?
- I-23: It's the same ones who ask. They rarely post cram sheets themselves.
- R: There is somebody doing that?
- I-23: Sometimes there is.
- R: Are there any who are more active in this Facebook group than others?
- I-23: Yes. Those who don't pay attention in class, those who need more info.

The use and creating of cram sheets reflects how students embed or transfer a learning strategy and carry out a goal-driven activity in the social media world, a learning strategy that aims at reproducing formal knowledge. But the above dialogue from an interview with a male student shows that cram sheets create divisions and disputes. His decision or plain refusal to publish his cram sheets creates values and divisions, identifying social categories between different student types. This is displayed through the ascribed projection of the social identity of "those who need more info". The student who requests digital items is ascribed a negative value, a "free rider", a type of student who attempts to benefit from the learning and work of other students without repaying them. These students attempt to "profit" from others' formal learning and work efforts, a type of "student opportunist". This user's story shows that not sharing does not encourage constructive online social interaction, as in essence it seems to create an imbalance. The student's attitude therefore displays defined norms or values commonly seen when items are exchanged between humans. If one is to share, the student has a clear perception that his contributions should have a symmetrical value and be returned. If something is being given away, it creates an expectation of reciprocity. The student knows that sharing means making it easier for student who does not play and understand the idea of social reciprocity. If he shares a cram sheet, he will probably get little in return and basically facilitate the formal learning process for his peers.

Using Skype to con homework

The fourth theme in the shadow student learning ecology demonstrates the performance of another personal knowledge acquisition strategy, illustrating how social media is used for what can be seen as a non-constructive way to achieve good standards for learning. This shows how students use chat software more or less to con their homework assignments, but equally also reveals their ingenuity in reengineering their online resource management practices. Such practices are seldom intended at retrieving information from the Web for reflection to create in-depth understanding of a topic. They are only sharing practices, where students use online connections of people from Facebook or Skype to manufacture and reproduce a digital item quickly with as little labor as possible. This applied especially when students needed to do their homework in a hurry, in order to avoid being marked for “non-completion” on compulsory assignments, a practice they referred to as “last minute work”:

- R: Do you use Skype to do schoolwork?
I-12: That too. To send files.
R: What kind of files are they?
I-13: Homework.
I-12: Among other homework. Collaboration assignments, for example. One writes something on one computer and then sends it to the others.
R: Is that a Word file?
I-14: Yes. Anything, really.
R: Is there someone who writes a document, and then circulates it?
I-13: It happens sometimes.
R: Who starts writing the document?
I-12: It varies.
I-13: It is often those who are quite structured.
R: Is it you guys?
I-13: Yeah.
I-14: Yes, you might say that.
R: Is that within your network? Is it so that one starts to write, and then some other adds more? Is that how it works?
I-12: No.
I-13: It's like “last minute work”. If it happens that your teacher is going to check your homework, then you get it one minute before you have to show it.
R: But can't the teacher identify this?
I-14: No.
I-13: No. They just look at the assignment.
R: Is this something you learned here, at this school?
I-14: We got the laptop this year.
I-13: PC was not that “cool” in junior high school.
R: It wasn't?
I-12: No. It was first in high school that we got our own laptops.

The transcript from an interview with three male students only contributes to our knowledge that in many school cultures students attempt to manipulate their homework. We see the example of an old and well-tried educational “ritual game of deception” between students and teachers. Teachers are of course familiar with the fact that students try to deceive them into the belief that they have completed their homework assignments. Here, this practice is embedded with their use of Skype, which act as a type of “back stage”, where the students circulate and coordinate a similar piece of a digital work, which is displayed on their “front stage” as the

individual work of a single student, when in fact it is not. Their use of embedding homework assignments with Skype is part of an impression management strategy, a type of theatrical social role play. The practice is doubtfully constructive for fostering good study habits, but shows that students use close ties in the learning ecology to modify “cut and paste” practices. We also see that students abide to some sort of code, norm or value, which still questions if homework has an educational value or if it is a practice intended on fostering students to become more autonomous and self-organized.

Facebook and Google Docs for learning

The fifth theme in the student learning ecology illustrates an advanced use of Facebook groups. It can be viewed as an innovative and positive way the students use Facebook groups to perform knowledge acquisition strategies to organize their formal learning activities. The practice is a blended approach, where formal learning is staged in the intersection between face-to-face interaction and use of digital spaces. It is a constructive learning activity and is not based on investing minimal personal efforts, to get their “homework done” before a final deadline approaches, for example. The students’ exchange of information is part of interaction, collaboration, and reflection, where Internet content is actively browsed and retrieved and transformed into formal knowledge, rendering a student self-initiated co-knowledge production process. The students performed this learning activity to create, to sensemake depth, and process information to formal knowledge by interaction in small online networks. It constitutes a practice where students attempt to expand their knowledge horizon on an already established socio-cultural experience. And much of this happened beyond the direct supervision of their educators.

Female students in academic studies reported using Facebook groups in this way. The female students created temporary Facebook groups as part of a school project, which lasted for two or three weeks and covered various subjects. My informants explained that they were supposed to work in groups and present and submit their work as an essay or give a presentation in front of their class. As part of this learning activity, the Facebook groups came to good practical use and worked as a type of knowledge repositories or coordination sites for storing of resources and material they evaluated as important to include in their school projects. This included sending each other URL links to blogs and news stories and uploading of documents which was part of their initial research. But the most crucial aspect of this organizing is how we find an example of two female students using Facebook groups as an *online discussion* forum, where they *reflect* upon on their assignments by writing updates and replying to them:

- I-15: We had a group project, called “2050 region”, which aimed at addressing how our region is going to look in the year 2050. We created a Facebook group where we discussed what we were supposed to write, what we should put in our project, what was relevant to have, and things like that.
- R: Who was most active in that group? Was that you?
- I-16: No, it was not a big group. All contributed and we were five students. And we used Google Docs to submit our final work.

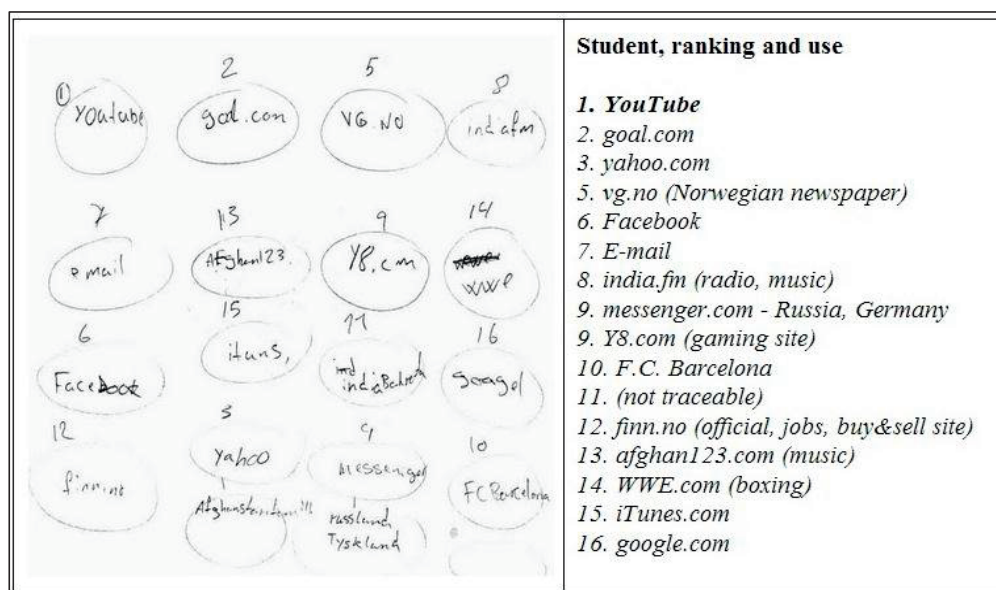
These two female students explained that they extensively discussed the project’s intention. The Facebook groups appeared to be used as a type of “digital sketch book”, shaping into a digital site to draft ideas to filter out unnecessary information, before they co-authored their school essay in the collaborative office suite software Google Docs. This displays a collaborative approach, where Facebook groups and Google Docs are used jointly in the organization of formal learning. The students demonstrating this capacity are often the most

autonomous, self-organized, and resourceful. They are accustomed to social media's participatory culture and engage in it as prosumers. The two female students, for example, were both active bloggers. They appear to master the complexity and chaos of the current web and are well versed in writing and reading texts. They possess a reflective skill which perhaps aided them to tell the difference in quality of what information is relevant and irrelevant. They manage the transformation of data to the logics of formalized knowledge or comply with the intent of goal-driven learning activities. They can modify and interpret web content, beyond "cut and paste" or retrieval practices. And students who used Facebook groups and co-authored school projects in Google Docs reported having positive learning experiences as they got help from their peers:

- I-15: And when all of us were going to contribute in the written part, I was very nervous, because I'm not so good in writing Norwegian. And then I sent it to the people in the group, so that they could look through it, what I should write more about or what was wrong. Just to be sure it was correct what I had done. So, I got good feedback. It helped me a lot that we had a Facebook group. I got to hear, "It was awesome, but I could imagine that you wrote a bit more about fish farming on Salmar too." And then I wrote a bit more about that. And the other would look at it and then it was time to submit it.

2. Organizing of informal learning activities

Figure 4.3 Mental node of a student from data sample.



Moving on to a different side of the shadow student learning ecology, I will now address how the students use social media to organize informal learning activities. This demonstrates a more advanced user behavior, reflecting how students use social media to perform other personal knowledge acquisition strategies than we have just examined. Moreover, it perhaps aligns to how the students normally use social media, which connects pursuing leisure activities and socializing with people. To demonstrate this empirically means examining the various ways the students use YouTube to learn about their hobbies. The students' use of YouTube content shows

that they are able to retrieve, and in some cases publish, user-generated content, and connect it to social practices that interest them. Students carry out accurate searches to locate distinct pieces of information, reflect upon and apply it to learn more about an activity they like. This is a self-organized process, suggesting that students learn from digital material produced by peers in the YouTube community, a self-organized learning happening beyond the direct supervision of any official learning authority.

My reason for focusing on YouTube videos is that many of the male students in vocational training reported using them. In several of the mental nodes we asked the students to draw, for example, YouTube surfaced at the top of the priority list of web sites they visited. This is illustrated in Figure 4.3. As one male student described it, “When I’m home, I always have Facebook, Twitter and YouTube visible”. Later, the interviews disclosed that there was a “hidden connection” between the web sites they regularly visited. YouTube videos figured as a digital resource and as a knowledge repository, which they used to learn more about interests and other sites they visited. This user pattern reflected that their use did not involve isolated learning activities, but connected to interdependent contexts that crossed social media uses with a social practice.

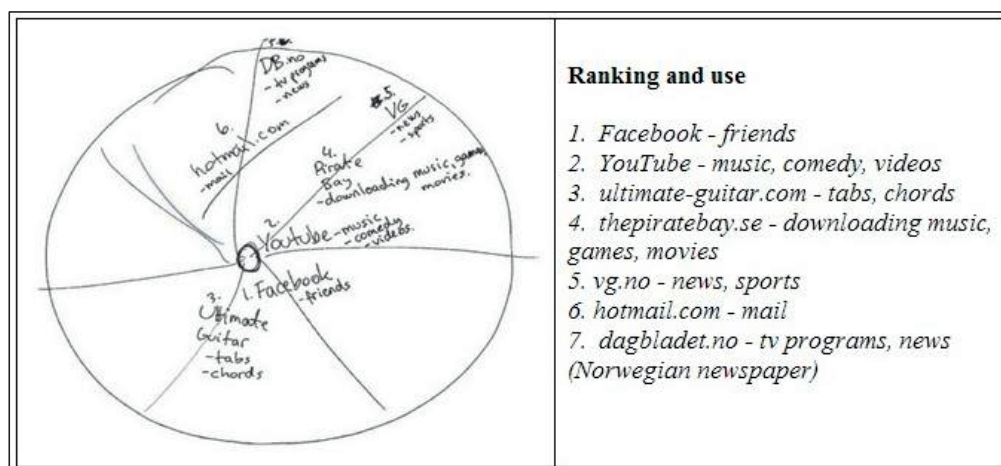
The students were fond of particular YouTube videos created by the YouTube community. YouTube has been in existence since 2005, and the YouTube community has developed a variety of internal web subgenres. These appear as particular YouTube media texts. These take the form according to the suggestions to search words, when you type a search word into YouTube’s search tool bar. One of these subgenres is “YouTube tutorials”. These YouTube videos reflect an emerging “peer-to-peer-share” social network and informal learning setting. YouTube is full of them. They are short videos uploaded by users. Many of these videos last from two to five minutes. One common format in many of them, for example, is that someone takes on the role of a type of instructor, giving step-by-step instructions on how to do something. The “tutor” or “instructor”, who is a person claiming some degree of “expertise” by self-accumulated experience, breaks down the work process into separate modules or sections. These YouTube videos cover a wide range of topics, whereby a person intends to model and disseminate a type of knowledge or skill to an audience of anonymous learners. The videos are behavioristic, claiming to contain informal knowledge. In a sense, they can be seen as informal educational video blogs.

The students reported browsing, retrieving, and interpreting a variety of YouTube videos. To show how they did this more accurately, the following data analysis examines this and covers the personal user experience of nine students. These are informants 1, 2, 6, 11, 12, 15, 16, 24 and 25: five male and four female students. Based on their user stories, I have also categorized them into three types of use of the videos. Each theme outlines their personal knowledge acquisition strategies. They show how they browse YouTube for relevant videos, retrieve, and study them, take the information seen in them, and apply it to carry out and learn more about an activity they enjoy. In this way, they are able to connect “dots of information” or, so to speak, they show traits of an active learning process. The first theme explores how they use YouTube videos as a means to learn to play a musical instrument. The second theme connects to how they use YouTube videos to learn about playing games, while the third theme shows how they use YouTube videos to learn more about photography.

Learning to play a musical instrument

YouTube is full of videos with short or long music lessons, which are made by amateurs as well as semi-professional and professional music instructors. These YouTube videos often follow a similar template, where a YouTube user takes on the role as an online instructor. YouTube music users make short videos, explaining how to play a cover song, different types of picking techniques, chord progressions, etc. The videos can act as replacements or a type of literacy-changer for those who do not know how to read musical notation. Many music lessons are “simplifiers of formal knowledge”, intended to make music theory understandable for those who want to learn to play an instrument or enhance their musical skills. The YouTube videos contain graphic displays of tablature, the chords used in a song, forming practical suggestions for a musical arrangement. They are media texts that make it easier for a learner to learn, as one can go back and forth and study the accurate way to play something. For those who did not attend a music school or private lessons, the normal way of learning to play an instrument has often been by self-study, rendering a type of autodidactic skill-set. Before the YouTube era, the “old school” had to listen to a record and learn songs by a personal “trial and error” practice. But now the YouTube videos have simplified this process; they deconstruct songs and show the arrangements in great detail, which makes it easier to learn your favorite music.

Figure 4.4 Mental node of I-2 from data sample.



Four students, informants 2, 15, 16, and 24, used YouTube videos containing music lessons. The students had similar but different approaches to how they used YouTube videos to learn and improve their skills on the musical instruments they played.

The first transcript shows how a male student uses a variety of digital resources to learn to play songs on his favorite instrument, the bass guitar. The student was studying to become a carpenter and attended vocational training. His mental node is displayed in Figure 4.4. He explains:

- I-2: I'm on Facebook, for example, I find some videos on YouTube. I want to learn a song. I go to Ultimate Guitar, learn the song. I only go to a web page, so you can download the tabs or the chords. You can find everything there. All kinds of music you can find on that page.

The male student explained an informal learning process, which often started when he is on Facebook. Thereafter, he looked for music lessons on YouTube, but he supplemented this with looking for and retrieving bass tablatures of songs from specialized music theory web pages dedicated to arranging music for self-studies. Such web pages contain an abundant quantity of chords and tablature, which he regularly visited. This meant that his way to improve his skills on the bass guitar included using digital learning resources other than just using YouTube video music lessons. We find other user patterns among female students:

- R: Have you ever heard about tutorials?
 I-24: Yes. I watch them a lot. I watch them, so I can learn to play the piano, for example, because I can't read notes. I try to see how they play songs.

In a group interview with two female students, they explained:

- R: Do you use YouTube to learn?
 I-15: I tried to learn from YouTube, to play guitar, but then I didn't have an awesome guitar either. It was purchased in Turkey. It did not work so well for me, but I learned some chords. It is possible to use it for learning. Not that I use it so much.
 R: Do you use it to learn?
 I-16: I have used it for learning.
 R: Explain.
 I-16: For piano, chords, learning stuff, like that. I've always played by listening, but when I come to a point in the song, where I don't really know where I'm going, I go on YouTube. Then I see how they play the song, how they press the keys on the piano. There are many "how to play" videos, which I've been watching.
 R: So, you use tutorials?
 I-16: Yes. I've used them.

The transcripts demonstrate nuances. Informants 15, 16 and 24 did not know how to read musical notation or tablature, but instead used YouTube videos as a direct "instruction tool". They studied YouTube music lessons to see how songs are played "in practice" and attempted to reproduce a music instructor's way of playing a piece of music into their own performance. This consisted of watching and paying attention to small details in the YouTube videos. Informant 24 studied which keys a music instructor pressed and tried to copy them into her own playing. Informant 16 points out that she learns songs by listening to them first, and if she struggles, the YouTube videos act as a supplement to get her back on the right track, showing the performance of highly personal knowledge acquisition strategies.

Using online peers to game

The second theme centers on another interesting attribute. My interviews with the male students disclosed how they extensively consume YouTube videos to learn to use and perform another of their hobbies, online gaming, showing also another way YouTube videos are used to pursue and organize informal learning activities. They studied YouTube videos to play games like *World of Warcraft*, *Halo* or *Counter Strike*. And there was a good reason for studying YouTube videos. Gaming is in many cases a massive undertaking, suggesting that it is more than just a random pastime deed, as adolescents play for hours. It is a complex social practice, which involves a long learning process – if one wants to get really good at it. And as with all social practices, there is also a learning curve. In this regard, YouTube videos were used as a knowledge repository to cut down on that learning curve. As with the YouTube music universe, we find similar user patterns in the gaming sphere. Experienced gamers record and show off

their great triumphs, nice moves, and how they uncovered a game's secret level, for example. Experienced gamers create YouTube videos, which other gamers use to learn tactics and strategies, acting as a type of "short cut" to cut down the learning curve of a game. We find a share-to-share peer social network emerging from the YouTube community, which produces knowledge that others use. Informants 6 and 12 used YouTube videos to learn to play games, which they referred to as "guides" and "trick moves":

I-6: If I'm playing a game, for example, and I need a guide, which shows me how I do it, then I watch that on YouTube.

R: A type of YouTube tutorial?

I-6: Yes.

Another male informant explains:

I-12: I have used YouTube a lot, and searched it for clips that can teach me trick moves, so I can play *FIFA* better.

YouTube videos act as forms of "quick readers" on how to play a game faster, easier than learning and knowing it the hard way, by playing and uncovering the difficult parts by yourself. Some would argue that this is "cheating". On the other hand, there are aspects with YouTube videos which show a higher degree of self-organizing than just learning short-cuts and interesting moves to impress your friends. They render a gamer system of cultural beliefs, centered on esthetic or personal taste:

I-11: I use it very often. Every time I am at my PC, its YouTube, Twitter and Facebook.

R: What's so great about YouTube?

I-11: They post a lot of funny videos, like famous people. I play PlayStation. There are many who make "commentaries".

R: What is that?

I-11: They play and comment, find errors in games, and they make fun of it. If a FIFA player has only one foot. They forget sometimes to make a foot of a person.

R: They point out errors?

I-11: Yes, they find errors in all games.

R: And then they make a gag out of it?

I-11: They make it so that it's funny, while they comment on it.

Informant 11, who was studying to become a carpenter, told me that experienced gamers make YouTube videos pointing out design flaws they find in games they play. This practice is not dissimilar to practices and the esthetic belief system seen in the hacker culture. Hacking is often about finding technical flaws in computer systems and disseminating them to the hacker community to improve running codes. This logic is also used among gamers. And finding design flaws is a type of low public rating of someone's work, which for the students has both a personal entertainment value and is also part of their informal learning. In contrast, Informant 1 used sides of this cultural logic in a different way. He was a content-producer of YouTube videos and contributed with his personal experiences to the YouTube community. But his motivation for making them was seldom driven by a public urge to educate his peers, rather it acted as a type of "public showing-off" to his friends. To publish videos on YouTube, however, they needed to have some degree of quality:

- I-1: I did it before, when I gamed. For example, if I did something crazy, I edited the videos and posted them on YouTube. It was a simple way of sending and showing them to my buddies.
- R: What did you make?
- I-1: You know CS?
- R: No.
- I-1: It's *Counter Strike*. It is an army, a shooting game. You play in teams. For example, we are five buddies, who team up against five other buddies. If you're alone, killing all five of them, it's very good. Then you could take that in the video, which shows how you killed all five of them. If you killed them in a good way. You can post videos of that. And you add the happy music.
- R: You created a video-collage?
- I-1: Yes.

The students reported using YouTube videos in more complex ways too. This shows how use and consumption of YouTube videos enters into a larger socio-cultural context or practice, where friends come together in their spare time and actively study YouTube videos to learn about a new game which has just been released:

- I-11: Most times when a new game has been released, all my mates meet to find out more about it. We often sit and look on YouTube to see new things. It happens when we have to learn this and that, and that's the way to do it. It's really that way we use YouTube.
- R: So you're sitting around and talking together?
- I-11: Yes, we are discussing.
- R: It seems to be very useful? It teaches you a lot?
- I-11: I learn a lot from it. I think that I couldn't have been able to play, if it wasn't for YouTube videos.
- R: It would have been much harder?
- I-11: Yes. I'm pretty sure of that.

The student argues that YouTube videos enact as an indispensable informal learning resource, which in essence is vital to learn to play a game at all. Moreover, it is an imperative to "crack it", as so to speak. It is a source to learn new aspects. But there is another side to it. He and his friends attempt make sense of a game by active interpretation, reflection and engagement on the basis of others' work by exchanging opinions and testing out their experiences to gain insights, a trait showing a collective informal learning process.

Learning about photography

The third theme shows how students use YouTube videos to learn about other interests. This example connects to the user experience of a female student attending academic studies. She used YouTube videos to learn about one of her favorite hobbies, photography:

- I-25: I use YouTube videos to learn more about photo programs, so I can edit images, for example. It's very complicated. Many people post videos on how to edit vintage photos, which I have been watching a lot.

We here find a case of a student who harvests informal knowledge produced by the YouTube community to enhance her own skills. More experienced amateur and professional photographers produce highly semi-instructional videos, which are based on how they have used computer software needed to edit their photos. These experiences enter into her informal learning process, as she watches a variety of YouTube videos covering different themes. This includes how to download and install photo computer software from open sites and how to use their embedded features or functionalities.

4.4 Summary

The intention with this chapter has been to contextualize the dissertation's first model, *the shadow student learning ecology*. I have striven to give a learner perspective on use of social media, arguing that students use social media to organize self-initiated learning activities. This has been exemplified by looking at the ways in which a group of students organized formal and informal learning. These students attended a high school where they were provided with laptops with direct access to the Internet, but a technical filter prevented them from using Facebook. To show an unexplored side of that situation, I describe how they performed a range of social media practices, which holistically resembles an autonomous learning ecology that was an off-limits site for their teachers. I explained this argument over the chapter's three parts. The first part linked my model to a framework in educational research, which attempted to develop a perspective on students' use of technology and learning. The second part outlined the background to the educational measures on providing students with laptops and experiences of it. The third part described the Alfa Organization and the students' experiences with social media uses. This part also paid particular attention to how students took the initiative to organize their learning activities. The findings are discussed in Chapter 8.

5 Authentic Learning Situations

During the school year 2011/12, a foreign language teacher with a great interest in social media taught two classes twice a week at a high school: a vocational class in English and a Spanish class in academic studies. Here, the digitally literate teacher decided to create curriculum-based classes organized around the use of social media, implying an attempt to decouple from a print technology that has defined the identities of the teaching profession for decades, the textbook. This involved motivating her students to learn a foreign language by using social relations and information derived from the World Wide Web as a source of knowledge. This also entailed using social media throughout the school year in her two classes. The teacher called this learning design *authentic learning situations*, which is the dissertation's second local model. The model is outlined in this chapter and examined by using a bottom-up perspective, illustrating how use of social media is embedded and socially constituted into an educational context. This means that the chapter's case story focuses on the practice of the dissertation's second actor, a digitally literate female teacher working part-time in foreign language teaching at the high school I call the Alfa Organization.

The above argument is covered over the chapter's six parts. The first part recaps the model's core idea. The model is connected to a practice perspective on use of technologies in organizations, which is also combined with perspectives on how professional practitioners create knowledge and understanding by reflection on their actions and experiences. The second part accounts for the case story's contextual background. I try to situate the teacher's practice by identifying how her learning design partially contradicts institutional views and use of ICT among teachers. The third part narrates the teacher's professional background and her teaching practice. The fourth part examines the design behind authentic learning situations. The fifth part looks at the implementation and enacting and her experience of her learning design. The latter is empirically illustrated by narrating *how* and *what* happened in her two classes, on a monthly basis, from August 2011 to March 2012. I examine the succession of particular themes and activities that dominated her classes. The last part summarizes the chapter.

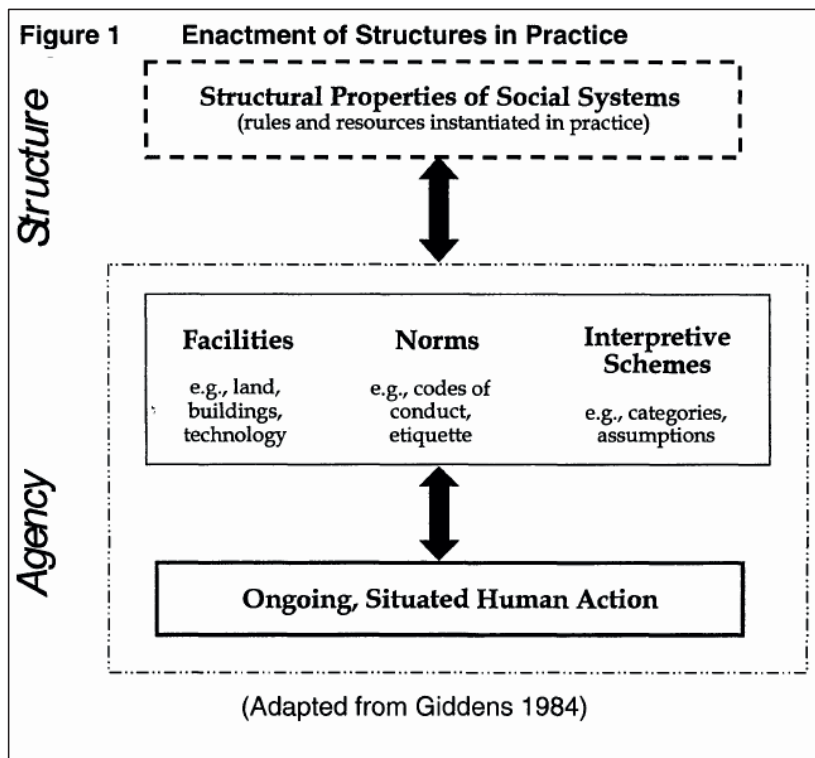
5.1 Part I: Orlikowski's *technology-in-practice* and Schön's *reflection-on-action*

To understand *authentic learning situations* theoretically, I attempt to apply and expand on Orlikowski's work. I link *authentic learning situations* to parts of Orlikowski's concept of *technology-in-practice* (2000).¹⁰ Over the years, Orlikowski conceptualized a practice lens to understand the use of technology in organizations. The practice perspective emerged as a response to theoretical limitations seen in earlier structurational models of technology used in organization studies (Barley, 1986; DeSanctis & Poole, 1994; Orlikowski, 1992; Orlikowski & Robey, 1991; Poole & DeSanctis, 1990, 1992; Walsham, 1993). The academic debate in organization studies centers on scholarly differences on how to frame the capacities of social structures embedded in users' interactions with technologies. This appears to be enabled by a "duality of technology" (Orlikowski, 1992), which suggests, on the one hand, that humans create social structures based on their use and interpretation of technologies, while on the other hand, these are later institutionalized by recurrent human action. This view means that inscribed into material artifacts we find immaterial rules and resources that can shape how humans interact with technologies.

¹⁰ The model's research perspective is accounted for in Chapter 3.

Early structurational models portrayed norms, values, and resources as embodied *in* technologies, but were criticized for putting focus on few stable technology structures as the analytical premise. This was epitomized under the “appropriation perspective” (DeSanctis & Poole, 1994), which assumed that when people use technologies they select and position themselves according to an appropriated technology structure. The appropriation perspective assumed that technologies are seldom neutral and that each has a cultural belief system attached to it. The appropriation perspective made it possible for researchers to establish whether users accepted the intention of a technology and to predict outcomes on organizational performance.

Figure 5.1 Enactment of structures of practice: Orlikowski’s adaption of Giddens’s framework



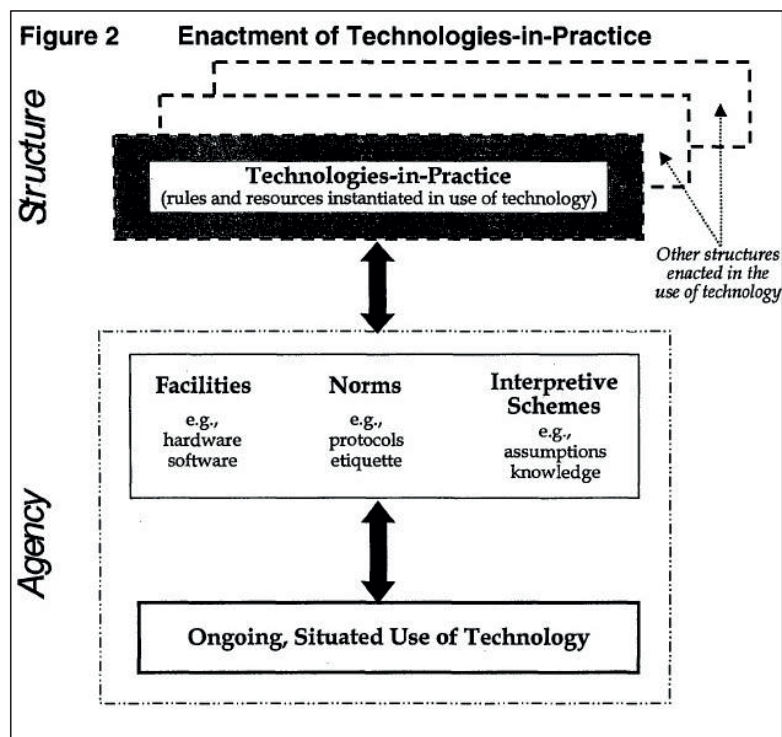
Orlikowski saw the above research perspective as problematic. She later wrote that:

My colleagues and I discovered, not only could we not guarantee a perfect translation of requirements specification to running code, we had no control over whether and how others would use the technology that we had built (both in the short term and over time), and we certainly had no way of knowing or anticipating the range of possible unintended consequences that might attend a technology’s use in practice and over time. (Feldman & Orlikowski, 2011:1246).

Instead, Orlikowski argued for a different view, which rested on moving the research focus to *enactment* over *appropriation*. Researchers could focus on *emergent* than rather *embodied* social structures linked to use of technologies. This meant analyzing human action and investigating how this enacts with *emergent* structures by recurrent and ongoing interaction with technologies. To expand her argument, Orlikowski turned to Giddens’s (1984) structuration theory and suggested the concept of *technology-in-practice* (Orlikowski, 2000), which is loosely defined as the sets of rules and resources that are (re)constituted in people’s

recurrent engagement with technologies. In Giddens's (1979; 1984) outline (Figure 5.1), social structure is also defined as the set of enacted rules and resources, part of a social system that renders social action and consists of three dimensions or modalities: *facilities*, *norms*, and *interpretive schemes*. Giddens suggested that when humans enter a situation, they will use previous knowledge of an action or situation, the facilities open to them, and the norms that inform their ongoing practices, and apply these elements to structure their social actions. And when performing actions recurrently, rules and resources structure their actions.

Figure 5.2. Orlikowski's adaption of Giddens to technology-in-practice.



While Giddens outlined a sociological framework for addressing the dynamics *constituting society at large*, Orlikowski adopted Giddens's three modalities directly to manage her practice lens (as shown in Figure 5.2). Orlikowski (2000) maintained that when people use a technology, the same dynamics as outlined by Giddens apply. First, when a member of an organization enters a situation and uses a technology, for example, he or she can draw on the ideas ascribed onto the material properties making up the technological artifact, like intentions imprinted by technology designers and prior users' interactions. This entails compliance with Giddens's modality of "facilities". Second, Orlikowski argued that members of an organization can use their prior skills, power, knowledge, assumptions, and expectations about a technology and its use. This involves including Giddens's modality "norms". Third, Orlikowski argued that members would pay attention to their knowledge of and experiences with the institutional contexts in which they interact and the social and cultural aspects linked to them. Such points meant to include Giddens' modality of "interpretive schemes". And as Orlikowski later concluded: "In this way, people's use of technology becomes structured by these experiences, knowledge, meanings, habits, power relations, norms, and the technological artifacts at hand"

(2000:410). This analytical replication meant that in the same way as Giddens wrote about the constituting societal dynamics of social structure and structuration processes, Orlikowski applied the same idea to express her technology-in-practice, which she also saw to be a type of social structure. Orlikowski stressed that these are not “out there”, but are virtual, emergent from people’s use and part of recurrent production by everyday action manifesting in situations.

Orlikowski’s (2000) practice lens involved directing a clearer research focus on patterns and conditions that become *routines* as a consequence of *recursive* user engagement with technologies in situations and organizational contexts, potentially how they constitute, change, are reproduced, and are reinforced or institutionalized. This should be taken into account, as organizational members’ use of technology is often recurrent, Orlikowski claimed. Orlikowski acknowledged that technology habits can take different directions and are temporary, situative, and contextually dependent. They can be enacted in different ways and there is no clear certainty to what end. For example, technology-in-practice can be institutionalized and become part of a shared use, applying only to a limited number of people in a department. Organizational members can enact and draw on *a number of* technologies-in-practice, which not necessary overlap with each other. Here, Orlikowski stressed the importance of the fact that there are *other* social systems in organizations that have their own social structures, like hierarchical structures within a bureaucracy (as shown in Figure 5.2). Their governing conditions can influence how people enact and use a technology, although Orlikowski chose not to include them further into her framework. Similarly, Orlikowski recognized that organizational members can modify their technology habits, which can lead to *reinforcement* or *transformations* of them. As an extension of the latter point, Orlikowski argued that transformations in technologies-in-practice can happen due to a number of factors. Users can experience changes in awareness, knowledge, power, motivations, time, circumstances, and the material properties of a technology, implying that actors can change their uses intentionally and one can encounter cases where humans enact a multiple and contradictory set of structures.

Orlikowski’s practice lens proposed that emergent structures in technology use are constituted and reconstituted through social practices, allowing researchers now to predict “unintended consequences” on organizational performance better. Orlikowski exemplified her practice lens by analyzing the enactment of technology practices by following the implementation of a technology intended for collaborative used by various user-groups across different organizations, the groupware Lotus Notes. This allowed Orlikowski to examine how a single technology was used by different actors in three different organizations. Based on her analysis, Orlikowski (2000) identified six enactments of technology-in-practice (1) limited-use technology-in-practice, (2) collaboration technology-in-practice, (3) individual-productivity technology-in-practice, (4) collective problem-solving technology-in-practice, (5) process-support technology-in-practice, and (6) improvisation technology-in-practice. Within each of these, different conditions, actions, and consequences were identified, by devoting attention to particular recursive patterns.

Considering one of them as a point in case, limited-use technology-in-practice, this was identified among consultants working in a multinational company. Orlikowski wrote that:

The most common technology-in-practice I observed in the consulting group involved limited use of Notes, and was enacted by consultants at all levels of the firm. Such use of Notes was minimal, even perfunctory, and involved opening electronic mail folders a few times a week, rarely, if ever, sending a message, and only occasionally accessing a discussion database to examine activity in it. (2000:415).

Rather, Orlikowski gives three reasons to why the consultants' use of Notes was limited. First, they perceived that Notes could only be used for *information transfer*, rather than being an effective tool applied to manage their relationships with clients. Moreover, the consultants had poor training and little understanding of the technical features embedded in Notes. Second, Orlikowski observed that the consultants worked continuously with the company's *time-based billing structure*, which meant that time spent on learning to use Notes could not be invoiced to someone, an action that would contradict the common work practice of a consultant. Third, for a consultant to use Notes for collaboration would also undermine his or her social status and relationships in a *competitive corporate culture*, which honored competition and individual performance. Collaboration was seen as counter-productive as it could undermine personal career advancement. In sum, Orlikowski shows that the consultants drew on rules and resources from other social structures – the properties of a corporation's governing structures – in their recurrent use and engagement with Notes, causing rejection of a technology intended to enhance their performance.

Orlikowski (2000) made other interesting observations where the enactment of *improvisation technology-in-practice* is of interest to my case story. This seems to be an expansion of Orlikowski's (1996) *situated change perspective*. This work showed use of Notes in different organizational contexts and illustrates how users unexpectedly reinvent and create new work routines as a consequence of *recursive* engagement around a technology, work routines that contributed to structural organizational change within a department where Notes was implemented. To capture this aspect, Orlikowski used her practice lens and focused on emergent structures that transpired as an outcome of the use of technology. This enabled her to frame the dynamics on how unintended consequences of technology use unfolded. Stating that, however, involved seeing organizational change differently. Earlier technology perspectives on organizational change (see: Blau et al., 1976; Burns & Stalker, 1961; Lewin, 1951), for example, framed organizational change based on an assumption of *stability*, not unpredicted conditions that might arise from *change processes* themselves. Orlikowski argued that previous perspectives on technology-based organizational change had shortcomings. They projected an assumption that plans for organizational change are implemented and managed by organizational members with the intention of having a *deliberate strategy* rooted in a prior plan, which are assumed to lead to a transformation of organization structures. This was problematic; Orlikowski argued instead that previous approaches did not adequately account for how unplanned patterns of organizing can arise from *emergent change*, which is the reality and conditions for the organizing principles of today's organizations. They are now based on flexibility and self-organization more than routinization, standardization and automation.

Instead, Orlikowski argued that organizational change and change processes needed a different take. This required an analysis of enactment and being "grounded in the ongoing practices of organizational actors, and emerges out of their (tacit and not so tacit) accommodations to and experiments with the everyday contingencies, breakdowns, exceptions, opportunities, and unintended consequences that they encounter." (1996:64). Orlikowski, who was inspired by Weick's (1993b) concept of improvisational metaphor, claimed that this meant challenging the view that organizational change is the result of a planned and gradual process managed by someone, but seeing it as an "ongoing improvisation enacted by organizational actors trying to make sense of and act coherently in the world" (1996:64). This entailed linking ongoing improvisation to situated actions, which Orlikowski elaborated in relation to Escher's (1986) metamorphoses. Orlikowski came to view change processes in terms of a series of ongoing and situated accommodations, adaptations, and alterations – sufficient modifications could be enacted over time where change could be achieved. This involved downplaying the assumption of prior staging of change, but looking at recurrent and reciprocal variations of practice over

time where variations are ongoing and there is no beginning or end in a change process. Orlikowski argued that this approach underscored that organizational change is rooted in action, not stability, allowing the possibility to analyze the ways change processes are enacted. Orlikowski maintained that this would be constituted by the ongoing agency of members of an organization, where actions taken by members reproduce existing organizational properties or alteration of them as part of everyday life.

To show the above argument, Orlikowski (1996) turned her attention to follow the implementation process of Notes and an Incident Tracking Support System (ITSS) technology in a Customer Support Department (CSD), which Orlikowski tracked over two years. Orlikowski paid attention to recursive practices that followed as an unintended consequence of the fact that specialists began collaborating on customer incidents logged in the ITSS. The initial intention was to log customer incidents *directly* into the ITSS, while the specialists had customers on the phone. But the specialists wrote them down on paper first and later typed them up to describe their personal experiences on the incidents they had worked on. And this detail would make a difference, as the logged incidents turned into an unexpected reusable resource. Detailed descriptions created a transparent database track-record system, which other specialists started using to troubleshoot incidents. Moreover, Orlikowski pinpoints that this reinvented the meaning of the ITSS, as managers started using it as a learning tool to train newly-hired specialists. During the course of the implementation process, such actions created recursive patterns or new work routines emerging from practice, which among other things contributed to changing the organizing practices and structures of the entire department, in effect leading to the institutionalization of new organizing structures. Orlikowski identified several changes, which included changing the texture of work, nature of knowledge, patterns of interaction, distribution of work, forms of accountability and control, and mechanisms of coordination. Orlikowski underscores that many of these changes were not planned in advance or predicted by the implementation team. Moreover, the changes were *not* caused by the technology itself, but rather enabled by it. Changes in the organizing practices in the CSD work place were caused by how the specialists responded “artfully to unanticipated problems and unexpected opportunities that arose in their work” (Orlikowski, 2000:419). Instead, it revealed an innovative way of working performed by all members of the CSD. Some of the changes were deliberate and intended, others were emergent and unanticipated. But the most important lesson is how an informal practice changed an overall work practice in the CSD, as the specialists began to work more collaboratively, a factor that was enabled by a departmental work culture that was learning orientated, team based, and cooperative. These were produced by forms of enactment and improvisation and emerged from a structuration process.

It is along these analytical lines that I attempt to apply Orlikowski’s work. An authentic learning situation can be seen as an enactment of a social structure I call “reflective technology-in-practice”. This represents a *structured* and *controlled* improvisation and experimentation with new ways to use social media in education, which is characterized by how the female teacher in this study uses *retrospection* and *reflects* on her own actions and practice “to engage in a process of continuous learning”, to use Schön’s (1983) words. I state this as it seems to be formed between certain re-constituting dynamics, which are motivated by an actor’s decision to perform a “trial-and-error-practice” with social media. This has some aspects, which share analytical lines with a social structure and agency matter. First, the teacher regularly tests out educational social media and designs on her classes, which happens in *action*. Second, she *reflects* on her enacted experiences on what “worked”, as an attempt to adjust herself to a recursive pattern to achieve a long-term goal she sets, which deals with improving learning. All this is ongoing, but takes place in a different organizational context than that described by Orlikowski; while Notes was implemented by an organizational authority, my case story deals

with the opposite. Relative flexibility and autonomy permits a teacher to “select”, “import”, or “shop” a variety social media applications. These are reused and reinterpreted to fit educational designs she regards as necessary, but are also combined and draw on personal experiences and institutional conditions. Behind authentic learning situations, the teacher can design her own “reflective-technology-in-practice”, but also implement it, enact it, and experience it through her practice, which in essence means that the teacher can *stage* her actions and investigate how that enacts with emergent patterns through recurrent and ongoing interaction with an educational technology-based design she created. In this way, I try to extend Orlikowski’s framework by analytically grasping how an actor organizes and designs an *emergent technology structure* (a technology-in-practice, to use Orlikowski’s own words), but equally to understand what happens when that same actor attempts to implement, enact and manage its ongoing actions in the context in which she regularly interacts. This can allow us to understand the dynamics and outcomes of how a structuration process unfolds and is organized.

5.2 Part II: Social media at the margins of institutional educational ICT practices

To contextualize how the teacher’s practice can contradict but be mutually shaped by social orders, we can view briefly this in light of certain top-down technology discourses. There is a tradition of investing in ICT and digital competence in the Norwegian K-12 education system, which follows as the result of the educational reform “Knowledge Promotion” from 2006 and the creation of a “fifth-key digital competence”. The goal has been to enable future generations to participate in the knowledge society, where technology plays an important role (Erstad & Hauge, 2011). In the wake of it, various actors have pinpointed inconsistencies between top-level visions for learning and the realities faced in the classroom. Erstad (2007) argued that future research needs to go hand-in-hand with the conditions created by new technologies in the classroom. Almås and Krumsvik (2007) observed that Norwegian teachers apply traditional ways of teaching. Adoption of ICT is assumed to be low and slow. Almås and Krumsvik argued that the content in subjects and pedagogical practices develop into distinct fields, such that “too often these components live their own, separate lives, distinct from each other, in which pedagogical input comes from the educational field, while content knowledge is tied to a different subject” (2007:480). Haugsbakk (2011) called for another direction, proposing that teachers should be reintroduced as the main actor in the classroom, as too much focus on student perspectives and new ICT can outweigh the pedagogical craft. A significant challenge troubling educators is the institutional gap between preparing and educating future teachers with the right digital professional competence to meet the demands of working in an expected technology-rich environment. Reports have attempted to forecast specific technologies that are expected to dominate schools. The report “Technology Outlook for Norwegian Schools 2013–2018” suggested that 12 technologies will influence the teacher’s work day, including social media (Johnson, Adams Becker, Cummins, & Estrada, 2013). This is contradicted by reports showing a mismatch between the digital competence newly educated teachers have acquired from attending teacher education and the reality of the use technology they face in the classroom (Gudmundsdottir, Loftsgarden, & Ottestad, 2014). Other reports indicate that many teacher education courses lack coherent study programs in digital competence and ICT (Hatlevik et al., 2013). This reconfirms that a gap between theory and practice seen in the education of professionals is valid within the ICT and digital competence area, causing researchers to point out that future professional teacher competence should be adapted to accommodate a deep understanding of technology, knowledge of students’ learning processes, and an understanding of the specific disciplinary practices and features characterizing individual school subjects (Lund, Furberg, Bakken, & Engelen, 2014). Others question if the education system is resilient to change and the adoption of social media services (Krokan, 2012).

The Norwegian Center for ICT in Education monitors the conditions for digital literacies and use of ICT among teachers and students. The report from 2013 shows contradictory findings, which express themselves along digital divides and user patterns (Hatlevik et al., 2013). A few of these can be identified as follows. First, the report indicates that the students who perform well in school are those who are most likely to be regular ICT users and to have a high degree of digital competence. Second, there had a drop in education-related use of ICT. Until 2011, ICT use in various subjects had seen an increase, but there was a slight reduction from 2011 to 2013. Third, findings demonstrate that computers are somewhat “untouched” in the lower levels. Students in seventh and ninth grade use ICT less than their peers in high schools. It is estimated that among students in the seventh grade, about 45 percent use a computer for only *one hour a week*, while among students in the ninth grade, 43.5 percent use a computer for between *one and three hours* per week. Among their peers in the high school, the numbers are significantly higher; 45 percent are estimated to use ICT for *more than 10 hours* a week. This gap is connected to the fact that the country’s high schools have distributed an institutionalized laptop to each student. The schools at the lower educational levels are not included in this initiative. Fourth, Hatlevik et al. argue that the Internet itself is seldom the preferred source of knowledge, as teachers use issued digital resources or learning material made by book publishers. It is pointed out that teachers still cling to the supreme position of the textbook as part of an ICT-based educational design. This means that many teachers work within a print-technology based framework.

The Monitor survey (Hatlevik et al., 2013) portrays a boundary between “ICT” and “social media”. From one perspective, working with “ICT” implies organizing practice around trusted online material produced by book publishers, online encyclopedias, and the textbook, while “social media” seems to belong to the leisure sphere, used for youth online socializing. The report gives little insight into how teachers use social media. Instead, it devotes attention to reporting student use. We learn that students use social media to listen to music and to chat with friends on chat software. It is no surprise that Facebook is popular; more than 95 percent of the students reported having an account. Students seldom engage in public online spheres, but read and like updates and enjoy watching published pictures. Few students said they wrote status updates or posted photos. Just 7–10 percent use Facebook to do school assignments. In sum, the Monitor survey labels social media as a source for potential disturbance, associated with cyber-bullying, and occasionally a constructive influence on learning outcomes. The report gives support to the latter assertion by referring to research, which has substantiated little connection between use of social media and positive learning outcomes on student performance (Junco & Cotten, 2012; Kirschner & Karpinski, 2010).

In sum, one can argue that the position of social media is formed against crossing dominating technology discourses. We see that top-down initiatives and technology link this to “ICT in education” and “digital competence”. This communicates inconsistencies on low goal accomplishment within several fields, reflecting that the organizational apparatus intended to support and educate teachers to work digitally, is mal-equipped to meet ongoing and changing technology developments. We can also see that bottom-up experiences show that many teachers have positive attitudes toward ICT, but organize their practices around trusted online material produced by publishers, online encyclopedias, and the textbook. Such opposing trajectories show potential gaps between intent and practice, where actors seem to create their own independent satellite systems that seldom orbit each other cohesively. Consequently, social media is ascribed the role of belonging to the leisure sphere and is used for socializing. This implies that it is perhaps uncommon to come across teachers who decouple from institutional practices and deliberately choose to organize their practice around use of social media services and information derived from the World Wide Web. Teachers can do it on paper, as long as this

aligns with the curriculum in the subject in which they teach. Norwegian teachers have a relative degree of autonomy to organize their practice, a point shown in research on work conditions among teachers (Bungum, Dahl, Gullikstad, Hugaas Molden, & Rasmussen, 2002; Haugsbakken & Mordal, 2009).

5.3 Part III: The digitally literate teacher

The teacher is a female teacher educator. She works primarily as an Associate Professor in foreign language didactics at a teacher education department at university level. Her main expertise is foreign languages. She holds a university degree and specializes in English, Spanish, and French. She has years of experience as a teacher and has worked at different high schools. Middle-manager positions are also on her CV. She has a professional network, allowing development of competences. She has published in peer-reviewed academic journals, contributed book chapters, and written research reports on issues connected to language training, didactic, and pedagogical matters.

The teacher can be described as an *early adopter* (Rogers, 2003), a term used about actors who are quick to adopt new technologies. This is reflected in her high degree of cosmopolitan capital and interest in using new web technologies. She is not trained as a computer scientist, but for several years worked with ICT or digital technologies. Her technology interests and competence is part of an established *work practice*. She said that she “had not taken a single course in computers”, but acquired competence as a technology user by carrying out systematic self-organized learning activities and by participating in professional ICT work. This implied that this interest was a type of autodidactic practice, where she herself had to take the initiative to gain and maintain knowledge. There was a lot of “learning-by-self-doing”. This meant that she had to rely on multiple resources to develop her competence, which is an ongoing process and spread against several knowledge horizons. This was necessary as the relevant institutional knowledge and resources, like academic research knowledge on ICT in teacher education, was assumed to be “behind” the latest technology horizon and the practice situation in the education system. This experience gap involved a deficit, meaning that she looked to resources beyond her own turf. This included activities like reading learning and computer education journals; attending technology conferences; registering with web services; working on ICT research projects; writing academic research papers; and engaging with peers.

Within the larger technology discourses on ICT in education the teacher had found a *niche*. She professionally identified herself as working with “social web” and “social media literacies”. She spoke about the importance of connecting, being self-organized, and addressing research and learning theories that related to social media, like the new learning theory of connectivism and Massive Open Online Course. This implied not limiting her interest in technology to an “ICT in education” or “digital competence” paradigm. The social web implied working with social media in different ways. This involved using and knowing about blogging, YouTube, SNSs, microblogging communities, online gaming, and wikis, for example, tools offering possibilities to enhance reading and writing skills. But it also required understanding of their wider implications for practice and the social. The social web meant favoring engagement in the set of social relations that connect people through the World Wide Web. Moreover, social media and the Internet offer access to information and resources, which can be used to promote learning in education and to work digitally. There are other sides too; for instance, the social web can give a more realistic presentation of reality and that can be realized through retrieving information and creating user-generated content to gain knowledge. The social web can be used to enhance learning, either for informal or formal purposes. The teacher often used the terms “Web 2.0” and “nodes in network” to describe how, beyond the user interface of social media,

there is an adoption of the cultural logics and practices that govern the network society. Stressing these, she communicated a substantial difference. She seldom used online material produced by book publishers or textbooks, for example, but favored social media services.

This teacher is an *innovator*, but operating at the forefront of technology, or at the margins of institutional practices, has both advantages and pitfalls. Although outgoing and seeking new professional connections, she perceived herself as being in a minority. She described her interest as a type of “lone wolf life”. She had few colleagues with whom to discuss her technology interests professionally. The challenge she saw ahead was genuinely to distinguish between the great variety of social media applications, ideas, belief systems, visions, contradictory research results, etc., on what had impact or could enhance learning, due to the ambiguity or biased presumptions that such were inclined to make. Her experience proved that it can be challenging to transfer formal research, academic knowledge or skills directly to her practice. To counter that, she had taken it upon herself to perform testing of social media in her own teaching practice, involving the creation of a “digital sandbox” where she could systematically experiment with social media to improve learning and perform curriculum-based learning activities. Central to it was combining her theoretical and research insights from scientific journals on learning by self-study in her practice-based professional setting and learning from that by continuous reflection, where she consciously looked back on what she had enacted, to enhance professional development, improve her understanding, and draw up new knowledge. She attempted to stage this by performing a “trial-and-error-regime”, where she tested out educational social media and designs on her classes and *reflected* on the enacted experiences as to what “worked” in light of the reading of theory, as an attempt to adjust herself to a recursive pattern to achieve a long-term goal she had set, of creating a social media learning design to learn foreign languages. To perform this theory orientated reflective practice, she held a part-time job as foreign language teacher at a nearby high school. This allowed her to have one foot in the K-12 system and another in higher education, allowing her to circulate between theory and practice.

5.3.1 The part-time job as foreign language teacher at the high school

The teacher worked part-time at a high school, which I have called the Alfa Organization.¹¹ The teacher was used to teaching classes in foreign languages in academic and vocational studies. For the school year of 2011/12, she was assigned two classes. The first class is referred to as the *English class* and consisted of 15 male students, who were studying to become carpenters. They attended the construction program in the school’s vocational studies stream. The same class attended lessons in other subjects throughout the week, hence the students knew each other well. The students were in their last year at school, many turned 18 during the time of my data collection. They were completing the first part of their vocational training which was to be followed by two years in apprenticeship training. The second class is referred to as the *Spanish class*. It consisted of 17 students in the academic stream with an even distribution between the sexes, consisting of eight male and nine female students, aged 16 or 17. They were in their first year at high school and were following a three-year progression. The Spanish class was made up specifically for this subject, students worked in different classes for other subjects.

¹¹ For a more detailed description of the high school, see Chapter 4, subsection. 4.3.1.

Table 5.1 Teacher's weekly work schedule.

	Monday	Tuesday	Wednesday	Thursday	Friday
1.				Spanish	
2.				Spanish	
3.			Spanish		
4.			Spanish		
	MIDDAY BREAK				
5.					
6.					
7.			English		
8.			English		

The teacher's work schedule was organized around attending the school twice a week. The English class was held once a week, on Wednesdays, for two school hours, lasting 45 minutes each, from 13.55 to 15.35, with a five-minute break. The Spanish class was held on Wednesdays from 9.50 to 11.35 and Thursdays from 8.15 to 10.00. The teacher thus taught six hours of classes each week. Meetings, preparation, and post-work were additional to this. Her work schedule is displayed in Table 5.1.

The teacher's two classes had contrasting approaches to studying a foreign language, creating different conditions as to how receptive the students were to learning English and Spanish, respectively. Language training is compulsory in both vocational and academic studies, but with a different status in each. The students in vocational or academic studies entered class with different motivations for learning and prior knowledge of the language. The vocational students were digitally literate but many had achieved low standards in formal literacy in their education. Some were assumed to be at risk of dropping out of education. Over the last few decades, experience has shown that many students who start vocational studies tend not to complete it. Nationally it is estimated that 70 percent of students who start a high school study program finish it after five years of study (Markussen & Seland, 2012). The introduction of academic subjects like math, English, social science, and various educational reforms, may be the reason why adolescents do not complete their high school studies. These factors were assumed to play a role in how motivated the vocational students were to learn English.

Foreign language training has a different role in the academic studies program. It is compulsory, but students can specialize in different languages. All students must choose a third language, in addition to Norwegian and English. French, Spanish, and German, are the most common. In some cases, students can also study Russian or Chinese. Students can start studying a second foreign language at junior high school level and continue with it when they start their high school education. In that case, they study it for two years, not three. If they choose not to start at junior high school, they have to start as beginners with a new foreign language when they start their first year in high school. This choice involves reading the subject for three years. The students in the Spanish class had not previously studied Spanish and they started in a basic introductory class.

5.4 Part IV: Designing and organizing authentic learning situations

Authentic learning situations is an educational design to learn a foreign language by using social media. In a way, it consists of “importing” and “shopping” various free and available low threshold social media services to an organization’s territory and using them to construct and organize learners’ paths that fit a work practice/process.

The teacher’s previous experience of combining her theoretical and research insight from research and development in a teaching context with a practice-based setting, and to learn from that by reflection, forms its basis. Theoretically, the model is organized around certain learning theories. On the one hand, the design draws on principles from Lave and Wenger’s (1991) *situated learning*, which claims that learning takes place in the same context in which it is used. Central to it, however, is that learning should be seen not only as transferring abstract and decontextualized knowledge from one individual to another, but is realized as part of a social process where knowledge is co-constructed from social interaction and collaboration. Learning is embedded within activity, context, and culture, and is rather unintentional and deliberate. This means that knowledge requires to be presented in authentic contexts, settings, and situations that lead to knowledge production. On the other hand, the model draws on principles from the new learning theory, *connectivism* (Siemens, 2005), foremost the ideas of self-organization and of creating connections between sources of information to gain knowledge. Siemens argued that the digital age is characterized by chaos and complexity, which sets new conditions for how information is organized and how the educator should work and learners learn. Information and knowledge is assumed to be distributed and connected in the individual and in nodes, as we live in a network society. The goal of the teacher’s work is to teach the students to learn to activate pre-established connections between pieces of nodes, by involving technical skills and critical thinking to judge the quality of a work process. This should take place under a condition of self-organizing and using strategies, which is imperative to develop into a capacity to “form connections between sources of information, and thereby create useful information patterns” from random initial conditions (Siemens, 2005). In other words, when a student works independently and manages the making of connections between pieces of information to understand a concept, learning takes place. The teacher tried creating and staging such a blended classroom-based learning environment.

The idea behind the model becomes clearer when it is seen in light of how teachers are assumed to organize their practices. This follows other organizing principles and designs, which are based on transferring abstract and decontextualized knowledge from one individual to another, foremost from the teacher and textbook to the student. The teacher explained that many teachers organized their practices around a form of self-invented script, which they learn after several years of teaching. This is not set at the beginning of their careers. A teacher will early on test different learning designs and strategies which he or she has acquired from university studies. At that stage, they will be in an “idealist mode” and shun the textbook. But they soon discover that certain practices work better than others. They see that organizing classes around the textbook “works” and, if it does, why not stick to it? The textbook has strengths: it offers standardization and linearity to knowledge and reality; it allows teachers a degree of premise control over the class; and is non-disruptive. The textbook avoids the equivocal nature of new technologies, thereby diminishing complexity and smoothing the learning process for educator and learner. The latter is perhaps illustrated when a teacher enacts with the textbook across repeated situations and creates learning paths /strategies from it. Teachers must plan and organize classes over an academic year, implying the creation of a long-term process. This involves planning and organizing based on the content and progression of the textbook. This may be a favored way to work. For the teacher, it is a design that simplifies the learning process

and brings tangible results, as it can give evidence that learning occurs. This can become important when assessment is up for review. Students will know what is expected from them and can coordinate their personal learning strategies accordingly. Students know what is to be learned, what can be memorized and reproduced. This involves the recognition of very familiar ways of arranging practice. Teachers give short texts to read with written assignments or one finds classes where teachers lecture and have discussions in class. This was not an unusual sight at the new school building. Teachers often stood in front of the blackboard and lectured, while the students sat and looked the other way. Her colleagues were assumed to design classes around the textbook and the blackboard. The same applied for learning strategies. The laptop had a minor role. Many teachers used YouTube or PowerPoint, implying that a common practice at the school was organized around socialization into a print-text culture. Our teacher would view this as a behavioristic inspired practice.

5.4.1 Decoupling from the textbook and reconnecting to social media

The application of *authentic learning situations* is to draw up another learning path. To describe it at its simplest, the aim is to downplay the role of the textbook and create lessons based on topics that are conceived as relevant to students, enabling a learning situation where the teacher and her students can enter the classroom only with their laptops, to engage with social media and the Internet. This principle represents a *decoupling* from a textbook-based classroom design. Knowledge is created, not by transferring and reproduction of information from one source to another, but by active co-creation between the teacher and students from non-institutional sources formed from social interaction. Arguably it represents decoupling from the dominating logics of an institutional practice, and challenging the supremacy of the textbook, which is expressed in a battle between “print” and “digital”. This implies an element of belief in the type of technology that most suitably represents “reality” and “the authentic”, the formal knowledge embedded in the textbook or information found on the Internet.

There are various motives, values, and beliefs at play. First, the teacher challenged the textbook’s supremacy. This was due to a professional disagreement. Textbooks are sometimes authored by peers who may lack competence in certain areas. Textbooks should ideally be based on research, be written by academics, and have a full reference system – which would enable the reader to consult the facts – features they lack in the K-12 system. This criticism is not uncommon and textbooks are subject to review. But in reality, this is a critique of the quality of the textbook that it does not always hold water and is suited to the importance of contexts. Second, there is a belief on what type of knowledge embedded in the technology renders our perception of reality. The textbook is not necessarily the *right* one, as conditions in society change and classroom contexts have to be taken into account. The textbook portrays a “sterile” side, which is more in tune with the institution’s perception of what is “right”, it is one-sided and top-down. Third, to counter that, the teacher relied upon social media and the Internet as an alternative. In a sense, she chose a different ontology, which portrays reality as flexible and ongoing. This is to embrace aspects that bring the learner closer to situations that reflect the reality of a young person’s life. Moreover, it aligns to the expectations and life that awaits them after high school. The textbook can seldom offer this aspect. The Internet gives a much more *authentic* approach to reality. The students interact on the Internet every day, so why not use it? It meets the students on their own turf. Adopting to the Internet pertains to enabling *empowering* of the students, as critical thinking and self-regulated learning are to be an essential competence that the student will experience later in life. Working with the web is implied to be more aligned with the overall intention of the K-12 system, to prepare students and give competences that can be used later in life and to fulfill an intention for studying in a life-long learning perspective.

On the other hand, *decoupling* from the textbook and *reconnecting* to a social media learning environment is an *ideal*. Using the teaching profession's autonomy and flexibility to define local work with the curriculum is an *intended and partial decoupling*. In reality, it represents organizing oneself in parallel and in relation to the textbook. The textbook did play a role in lesson planning, as the teacher followed the progression and structure of the textbook. This was relevant in both the Spanish and the English classes, as we will see later on. So there are elements of being bounded by a textbook practice. But swapping does pose challenges. A teacher can lose the ordering quality of the textbook. Other factors play a role. One has to be up-to-date on new technologies; to expect that they can break down; that using them is in itself a learning process; the communication power of social media becomes part of classroom practice; there is a transparency challenging the notion of trust, perception of audience, public spheres, privacy, etc. This means that decoupling and reconnecting to social media not only represent *working* and being *organized* differently, but it is a tampering with, perhaps a rearranging of, an established way of working or organizing learning processes. The most drastic change is the introduction of new technological frames and logics, foremost the new communication paradigm of the Internet. This design now embeds and allows multiple users to contribute and receive information and *suspends* the artificial boundary between information and communication tools. Furthermore, one can decouple from the textbook's stability and linearity to reconnect to social media's participative dynamic interactivity. To manage this change, the teacher had developed personal strategies to help her, which played a role in designing and organizing her practice. I outline the strategies in the following sections.

Strategy 1: The choice, use, and designing of a social media tool kit

The first strategy deals with engaging with social media or the technology itself. This needs to be managed as part of an ongoing process, as the technology landscape changes quickly. This entails coping with many different challenges. One needs to distinguish what is "*new*" from "*old*"; to know what is qualitatively a *good web technology* that can enhance learning. Besides, there are significant commercial interests that demand to be considered. Relying on researchers' evaluation of them is seldom enough, as their knowledge horizon is seen to be behind the development of technologies. Therefore, the best way to stay up-to-date on "what is going on" with new "tech things" is to engage with the technology itself, thereby reflecting and learning their qualities by personal testing and debunking:

- I: I try all the tools I come across, I don't spend much time on them. Since I have this experience, there is a threshold for adopting the tools. I have gone astray. Some programs I still can spend a lot of time to familiarize with. Then it's worth it, as it is much easier to compare what you get from the different applications.

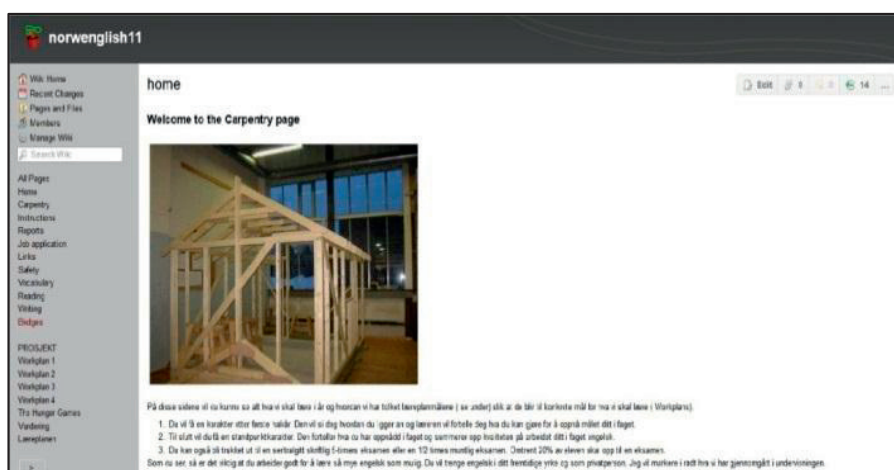
The teacher's experiences are several. She had an "antenna" placed in the social media landscape, acting as an instrument for quick monitoring and testing on whether she should adopt or reject the tools. New social media services were often referred to as "tools". She tested a wide range of them, everything from individual to collaborative tools. Pedagogical social media software was seen to differ in quality, for example. But she had developed a high rejection rate and did not spend much time on testing everything she came across. Her experience taught her that many "new services" communicated the same organizing principle or intention, just with different labels. If something passed her filter, it would be tested in class. This could last for a shorter or longer period. Her criteria for adoption was often referred to as whether a social medium "worked", implying that if her students liked using it and felt comfortable, it could serve a purpose. This experience gave clear ideas on teaching, enabling her to establish if the "new" social media software had the qualities she was looking for.

Table 5.2 The teacher's social media tool kit.

Linearity	Participative Interactive Dynamic Interactivity
Textbook	Blog Wiki YouTube GoAnimate PowerPoint News Web Pages Language Gaming Applications

Over the years, she had developed a *social media kit*, if you like. This is displayed in Table 5.2. We can see how this differs from a textbook. While the textbook communicates linearity, social media has other embedded ideas, based on a participative interactive and dynamic interactivity. While her colleagues were assumed to use PowerPoint and YouTube as supplements to the textbook and school LMS, her tool kit consisted of Web 2.0 applications, mainly blogs, wikis and YouTube, in addition to supplementary web services. Each of them had their original embedded intentions, but was re-scripted to fit her design.

Figure 5.3 Wiki used by teacher in English class.



The teacher's redefinition of Wikispaces, which she had used since 2009, is one example. Wikispaces is an open source educational software. It follows the same ideas as any wiki, allowing users to add, modify, or delete its content using a simplified mark-up language. Wikispaces is a collaborative tool, allowing individual contributions. Users can edit a page, which can be created around a topic. Wikis serve different purposes, like knowledge management and creating online communities. The teacher re-scripted the use of wikis. She took on the role of publisher and employed wikis for individual purposes, but used them as her classes progressed throughout the school year. This meant that wikis had a contextual meaning and were supplemented with new information, as the students worked on specific topics. Hence, the use of wikis was not static, but changed and was created continuously as the teacher and her students worked together on topics. The wiki was an organizer, acting as a resource guide and class digital bulletin board. The wiki gave the students an overview for the school year ahead, with the material to be covered. It explained what the students were to study; what was to be expected from them; and assignments. The wiki worked as a means to operationalize and document the curriculum, showing the subject's synopsis with learning goals and objectives.

The wiki acted as a teacher-instructed pathway to the web and had links, vocabulary, and suggestions for reading material. Two wikis were created by the teacher, one for each class. An example is displayed in Figure 5.3.

Another example is blogging, which she had used since 2008/09. A blog is the oldest of all Web 2.0 technologies and is an online diary, which today displays content in a reversed chronological order. Until some years ago, blogs were usually the work of a single individual, occasionally, a small group. They were themed around a single subject. This has changed, so that some have classified it as similar to a SNS. In the public sphere, a blog displays the work of one individual, implying a type of individualization, allowing construction and managing of online social identities. The teacher viewed it differently:

- I: Blog or wiki, for me they have different intentions. Blog is more suited for reflexive writing, where you can write a little every day. This is because of the structure. Wikis are more logically structured, like a book, with theme and content. When I use blogs, I use it in initial training, where they write very little. After one year, purely structural, I think it is appropriate to move to a wiki, if you think about blog and wiki as something of the same.

Blogs were redefined as a “student online workbook”, used for training in writing of texts, created to practice reflective writing. The students were supposed to blog on a regular basis. All were expected to create a blog and publish on it. Blogging would be the equivalent of submitting a piece of schoolwork in written and oral form. The teacher did not exercise strict rules when students were supposed to publish. This could be an assignment they were working on in class or a piece of homework. An example of a student blog is displayed in Figure 5.4.

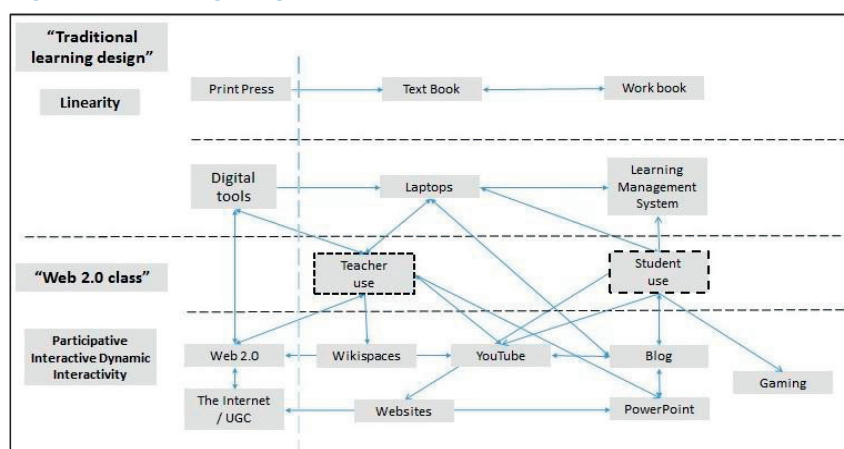
Figure 5.4 A student blog in the Spanish class.



The teacher used a variety of audio-visual media. They included on-line gaming, video animation software and YouTube videos. Audio-visual content and media refers to a digital technology, having both sound and visual components that can be used and shared among users. YouTube was a favorite. YouTube also serves as an example on how the intention of a technology is reshaped to a learning design, which extends into a physical space, the classroom. YouTube videos had positive affordances, as they could stage a learning process. The strength lies in that it connects with the social world of the students. The teacher argued that YouTube videos could trigger and organize classroom discussions to produce reflective knowledge:

- I: YouTube works everywhere, but it works in a context. When you teach something, when you want your students to understand concepts, you can use YouTube to visualize knowledge. If you have sound and picture, you use both brain hemispheres and you activate a larger area. And that leads to learning. There are scientific arguments for YouTube works. I think people are beginning to understand that, it is more than just video clips with music. There are so many good things on YouTube ... There are many teachers who don't know that YouTube is more than just music and entertainment. There are very few who know about the opportunities available, when it comes to documentaries, tutorials, lectures, which can allow you to become updated by listening to a good lecture lasting 20 minutes or so.

Figure 5.5 Teacher's organizing of class and use of social media.



In sum, the teacher's use and testing of various social media had allowed her to create a "social media tool kit" which would constitute the base for a classroom practice. This is illustrated in Figure 5.5. The differences between organizing a class based on the textbook and on social media can be many. One is the rearranging of the cognitive principles of how a learning process is expected to be organized and unfold. A textbook approach is based on *linearity* and *stability*. Knowledge is assumed to be formed around transfer of knowledge from a source to another. Embedding Web 2.0 applications into the equation is somehow to symbolically *switch off* the supremacy of the textbook. Placing social media in the driver seat is to stress a participatory interactive and dynamic interactivity-based approach. New logics and conditions are introduced. Learning is to transpire from social interaction, embedded in the Internet. This means to suspend the safety and trust offered by the textbook and open a gateway to an external environment, making the condition for learning *transparent*. Web 2.0 links the educator and learner to multiple open-ended ongoing contexts, not by reproduction and memorizing of printed knowledge. The learner is challenged toward collaborating, to engage with information from multiple sources, to critically evaluate the information at hand, and to publish content, becoming prosumers rather than consumers. This implies that the students are now faced with entering a regime intended to make them self-organized and to tackle the complexities of the Web, allowing students to engage in a process they can influence, but also giving them the opportunity to influence their own development.

Strategy 2: Embedding a strategy for learning to create knowledge

The second strategy deals with creating an idea and having a set of approaches on how learning should be performed and carried out in the classroom setting based on social media and the Internet, as the teacher has decoupled and reconnected to another communication paradigm. This is needed so that she has a perception on how to perform, manage, and enact her role as teacher, when the students work under changed and different conditions. This is required as the knowledge production setting is now focused on emerging from *social interaction* embedded in technology rather than being knowledge directly transferred from a textbook. Her experience taught her that letting the students “free on the Internet” and hoping that they followed her instructions, would seldom pay off. Googling information with no intent in mind rarely contributed to the student’s learning. This meant that using social media for learning purposes requires some degree of teacher instruction. The teacher needed to have a pedagogical approach to cope with the participative interactive and dynamic interactivity of social media.

A way to illustrate this difference, for example, is to compare how a teacher would be expected to instruct his or her students when using “institutional technology”. If a teacher used a book publisher’s online material, an online encyclopedia, or a LMS, for example, this would be seen as a *behavioristic* or *instrumental* learning approach. The teacher would see this as a confined learning environment, a “bubble” she aimed to “pop”:

- I: For me, the textbook is made for school. It’s not designed for reality. It’s a protective small bubble. What happens when you go on the Internet and nobody is protecting you, because you did not learn to operate on the Internet in school? Where are you going to learn this? Reality is protected on the LMS.

Social media invites engagement, implying a *suspension* of the safe haven that an education system offers to its students. She needs to adjust to this changed condition. Opening up to the Internet can constitute risks and dilemmas. Transferring responsibilities and trust to students means that they can use it differently, like spending time on SNSs for social purposes. The teacher had to create a flexible and active teacher management style, where, on the one hand, she supports and invites the students to process the information they engage with, while on the other hand, this requires a type of awareness on how much premise control is needed in the classroom setting. That she needs to have a variable and pragmatic teaching style adapted to the learning situations became clear when she was asked about where she positions herself in relation to the three larger learning theories: behaviorism, cognitivism, and constructivism. The transcript below, for example, is taken from an interview just after she finished a learning activity in her English class, and illustrates that there are no fixed or set boundaries:

- R: In terms of learning theories, the three directions, where would you place what you are doing?
- I: I move between them. The first part is student driven. They will come to the table with their thoughts and ideas. If I do not get a response, that’s what I get. Sometimes it’s the news, sometimes it’s not. Today, I instructed more than I needed. There was no special thing that happened last week. It should basically be student driven. That is cognitive learning theory. When they discuss a bit, then we are in the social constructivism. Because I can say that is the way it is, yes, it is like that and they accept it for what it is, because I have talked with another about it and he thought it was straightforward news. Part two, if I am to give information about such a thing, for example, the grammar section, it’s a

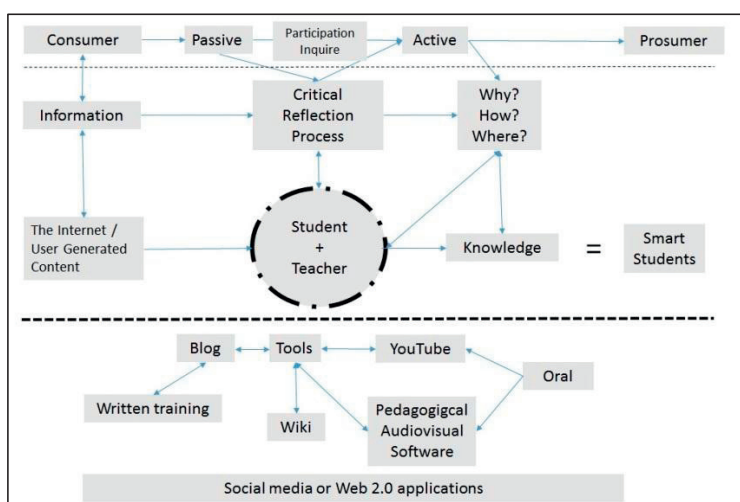
knowledge dissemination. Dissemination is behaviorism. The last part is the more individualized. I mix everything.

R: I was wondering where you place yourself?

I: I don't want to label myself. In comparison to other teachers, I am probably more towards the social constructionist. I think that the students should be able to decide content [and] theme.

The teacher's learning strategies appeared to be formed around the principles of *democratization* and *empowerment* of the students. Classes were supposed to be theory-informative orientated, where knowledge is to be created by critical reflection between her and the students, forming a critical literacy. An important principle was the use of multiple sources to inform, create, share, store, and interact, to gain insights. The base would come from open and problem-solving tasks and shared reflection on the basis of students' previous knowledge and available information. Classes were intended to focus on reading and writing literacies. She also tried to shape the individual students through the attribution of attitudes and value to their thinking and actions. She described each student's knowledge as acquired through a complex network of personal stimulation, prejudices, opinions, self-corrugations, and exaggerations. She used her students' learning processes to gather data for formative assessment.

Figure 5.6 Model for knowledge building.



Consequently, behind *authentic learning situations* we can create a model for knowledge building. This is attempted displayed in Figure 5.6. Knowledge building occurs on the premise that the student is assumed to be part of an interconnected *node* in his or her network. As a node, the student has possibilities to interact, choose, and navigate among a wide range of connections linked to the web. These can lead to information and resources, which can be searched and retrieved. This happens in a process characterized by social interaction between actors. But searching and retrieving information gain little purpose, something that stages what role she takes in the student's node. The teacher's role is to give them *concepts* to explore. Based on exploring by systematic, explorative, and critical reflection of those, information turns to knowledge, where students see connections between the pieces they have interacted with. When this happens, learning is believed to take place. Connecting pieces of information could lead the student to realize a larger picture, the essential *context*. These are related to social situations in which they interact. This turns into a process, based on challenging the assumptions

that students have about reality, foremost by teaching them to ask questions on what lies beyond a larger picture. By asking students “why”, “where” and “how”, this would be part of a type of scaffolding strategy, where the students’ knowledge would be extended.

This is about setting the student in the center. Moreover, it is about how the teacher can teach the students to gain knowledge, not motivated by *direct transferring of knowledge*, but by the students partially building it, from their own thinking, by performing searching and retrieving strategies, which turn information into knowledge, a competence believed to be important in the future. The textbook offers only a *few* paths to that. The social web involves interaction with *multiple changing* sources. One needs modeling strategies that pay attention to evaluate the *quality* of the information; how they perform their search strategies; how they retrieve information; to what extent they can connect pieces of information and see the differences between them; if they can expand on previous knowledge, etc. All of this means to operate beyond “cut-and-paste” practices. This implies stressing the importance of reflection, where knowledge is created in a two-way dialogue. Further, this entailed engagement with understanding the meaning of user-generated content and embracing chaos and complexity,

The flipside is that such ideas need to be embodied and enacted against written practices too, in order to work with writing literacies. Beyond engaging, the teacher intended to teach her students to turn their knowledge production into text, which was not to be performed on a piece of paper, but by publishing online. This is to challenge the students by changing their roles and relations to a technology. The students were assumed to have a “read-only” or “Web 1.0” approach. This was a misplaced frame, which did not align with social media’s participative interactive and dynamic logic. The students were assumed to interact with a print-frame, which is to be *passively* orientated toward a technology that constituted around *active* sharing and collaboration. This involved motivating the students to change their role from *passive consumers* to *active prosumers* of digital content, aligning to the logics and premises of Web 2.0 interaction, meaning a *read-and-write* approach.

Strategy 3: Embedding the competence goals from the curriculum

Although the social media tool kit and the concept for creating knowledge are in place, the third strategy deals with *operationalizing* the learning goals from the curriculum. The overall objective is to learn a foreign language, English and Spanish, the *content* of the knowledge production process to come. These are governed by the national curriculum, which is a common program of study in schools that is designed to ensure nationwide uniformity of content and standards in education. This means that it is not the contents of any particular textbook that defines what a student is to learn, but the learning goals from the curriculum. The curriculum explains content, organization, activities, and the number of hours to be devoted to any given subject. It states a series of overall learning objectives and there is many competence aims. These are organized around each subject and spread across the K-12 system. They have a set of competence goals, which are distinct learning goals for students.

Recent educational reforms have led to an increased focus on goal thinking. This has involved more management and organization of the competence and learning goals. This relates to assumed forces of decentralization, where responsibilities have been “pushed down” the education hierarchy to reduce centralization and empower teachers. These initiatives have been completed to fulfill ideas of increased teacher autonomy and flexibilities, to make greater space for exercising teacher professionalism.

A significant change connects to the fact that new curriculums have been designed and new criteria based curriculums introduced, which have created new challenges for teachers. While earlier curriculums were detailed, this is now reversed. They have been simplified, causing concern. Certain voices criticize the curriculum for being too general and ambiguous. This has created a perception among teachers that it is challenging to operationalize to fit local practice. Countering that, seminars and workshops have been organized across the country to train teachers on how to adapt national competence goals to local ones. These have been organized to give teachers “hands-on-experience” and “how-to-do-it-in-practice”. This puts more workload on the teacher to engage with the logics of the goal-thinking management apparatus. This can give the teacher more choices and create greater awareness of the objective behind learning, but also imposes a logic where he or she must learn and adopt a practice or script that is based on interpreting and operationalizing the curriculum.

This entails that there is an increased individual responsibility to make sense of and create meaningful learning activities, which eventually becomes the enacted content of the subject that a teacher teaches. In many cases, teachers are presumed to be solving this by merging the new competence goals with continuing to use the textbook and the practice they have always used. This means that the content, progression, and structure of the textbook will often form the overall structuring principle for how classes are organized and enacted in practice. Following it can bring certain benefits. The knowledge is framed as “non-negotiable” and one has a fixed way of knowing *how* and *what* the student should learn, representing the mentioned behavioristic approach. The content of the textbook is what is to be learned, forming the base for the reproduction of knowledge. “This is the content, learn it”, as the teacher sometimes remarked. Many teachers will perhaps prefer it, as it is a routine that can be repeated making the workday less complicated. Students will maybe agree, as they know what is expected from them. This can therefore act as a “cookbook” to solve the challenges associated with operationalizing the learning goals in the new curriculum:

- I: If you ask another teacher, he or she will search through the chapters. I do not work with the textbook, but with topics. I have a series of topics and I will use the textbook as support. Many teachers have chapters 1, 2, 3, 4 before Christmas, and 4, 5 and 6, after in their work plans.
- R: Is it common in school?
- I: Yes, very common. Teachers are very tied to textbooks.

Decoupling from the textbook and reconnecting to the Internet and social media represents another approach to operationalizing, demanding other strategies. The teacher organized this around self-designed *themes*, which are sometimes based on the chapters in the textbook. But learning how to perform it well appears to require pre-defined knowledge and practical know-how. The teacher had acquired this over the years, through her professional work; she had various positions in local committees working with downscaling the national curriculum to local learning goals and had been a member of task groups that created national curriculums in foreign language. This enabled her to see and crack “the code”, to see the pattern behind the reforms:

- I: Once you understand how the curriculum is structured, it is easy to operationalize it. Then you know the meaning of written literacy, what is the oral literacy. You can then define the literacy theoretically. It is not that difficult to create criteria that hold a standard. If you have not thought about it, then it is very difficult.

Based on this, the teacher defined personal criteria on how to perform the operationalizing process in practice. This gave clarity and a starting point. The recipe for successful operationalizing starts with what a teacher relates this to; his or her professional knowledge of the subject; professional insight on language and language development; and understanding that learning goals are adaptable and flexible. This can ease the challenging work ahead:

- I: You have a number of goals set by the Udir.¹² It is my job, to know what is demanded by the different ones. That is what characterizes goal accomplishment. Udir has problems with defining assessment criteria on national levels. They talk about doing, but they have not done it yet. That is my job as a teacher. My job as a teacher is to go into the subject and I must define it, because each subject has its own structure. Language training is characterized by written production, spoken interaction, which is dialogue, oral production, which is presentation, and reading and listening, which are the five skills, that are to be defined each on their own level, in a taxonomic ladder.

The teacher's point is that the competence goals are neither complete nor specific. They lack ingredients, which she has to *add* and *perform*, by use of her professional expertise in foreign language training. For example, in the same way that a baker needs practical and professional know-how and insights on various ingredients and recipes to make the perfect bread, the similar idea applies. The operationalizing must be based on professional insights on language development and learning. These conditions are seldom stated in the curriculum, merely assumed. Omitting these conditions will make it challenging for a teacher to know whether language training sessions succeed or fail. This means that when making learning activities, you need to consider that competence goals are not only defined by their literate value, but by the five basic features that define language training.

This is often solved by using the textbook. The content of the textbook in foreign language training is structured to follow the idea of *language progression*, differentiated to fit the learning level of the student. This is displayed in the textbook's structuring of its *chapters*. Textbooks in basic training in Spanish, for example, start with basic introduction and progress to other themes, to learn numbers, pronunciation, letters, before addressing the conjugation of verbs. Teachers, who organize classes accordingly to the *chapters*, will work according to an academic print culture and be bound to grammar. You can expect that students would work and learn to write and structure a text, perform assignments, and listened to a tape-recorder to get to know the sounds of the language. Focusing on self-scripted *themes* over the textbook's *chapter*, on the other hand, poses challenges, but also enables adaptations. But one is somehow bounded by the textbook. You cannot "switch it off", as the mentioned *language progression* is imperative safeguarding to anyone wanting to learn a foreign language. Instead, one can give it another role. While most teachers would use the social web as a *supplement*, why not do the same thing? The teacher attempted to do this by using it as a *supportive* instrument, not as the "main text", but planning her classes *around* it. Doing so has implications, however.

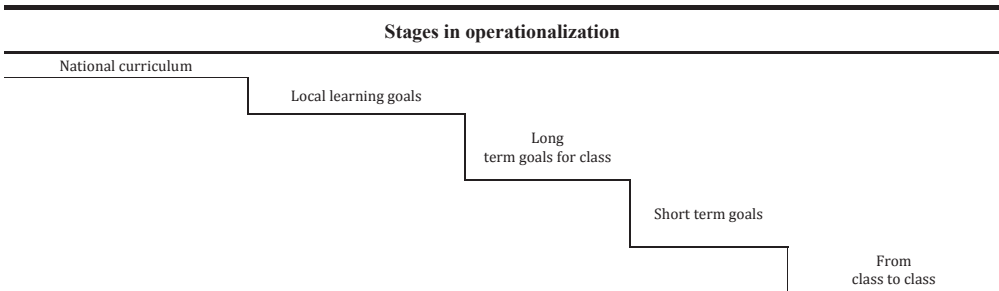
The teacher had to perform a review. At the beginning of the school year, she examined the textbook. She said to herself, "This is what the students have to learn, this is what is compulsory". Having established that, she could focus on other content she evaluated to be important for the student to learn. As teacher, she had a degree of autonomy which allowed her to do that. As an alternative, she would focus on themes, acting as a foundation for her classes throughout the year. How these were organized was not always pre-set. She used the idea of

¹² The Norwegian Directorate for Education and Training.

student *democratization*, and asked what they wanted to learn. The actual concretization of the learning activities would be done in *collaboration* with her students, as far this was possible. Rather than *imposing* learning goals on the students, this was co-created with them. This meant that social media took another role. Instead of having learning activities tied to the textbook, one could use the possibilities embedded in social media, which bring up the relevance of authentic learning situations. Social media based learning activities would allow the students to work with “real-time matters”. For example, rather than reading a dialogue in Spanish from the textbook, why not engage and talk with Spanish people on the Internet? Such a practical learning experience could prove to have high learning value.

The flipside to this is that our teacher needs a strategy on how to perform the operationalizing. Goals have to be managed, organized, and translated into the tangible, which in most cases deal with creating meaningful learning activities. Over the years, she had developed a strategy to deal with that, which aimed at ensuring three aspects: to translate the learning goals from the curriculum into her subjects; to embed the social web to work digitally; and to use information from the Internet to form knowledge. Her script is displayed as a model in Table 5.3. This follows a downscaling pattern or “staircase logic”. For example, when a learning goal is formulated on a *national* level, it is perceived as ambiguous. The task ahead is to reformulate it, to make it tangible, making it *less* ambiguous in a local context. This is reinterpreted on a local level. When they have been operationalized into this level, they must be reorganized, into different categories, long-term goal, a short-term goal, and on a class-to-class level, where the latter has to be managed further, requiring to be adaptable.

Table 5.3 Model for operationalization of competence goals.



Competence and learning goals not only require managing from a national to a local practice, but have to be managed and organized across the year too, ideally in a dialogue with the students. To realize that, the teacher developed four approaches, which implied that learning goals are not fixed from the start and have to be part of a flexible regime and process.

First, she would start with what she called “the intended learning result”, implying that the learning outcome of her classes had to be projected before the learning process itself started. The teacher had to create a temporary path to learning. One challenge, however, was having an idea of a learning situation that linked her ideas and background in English to the students’ choice of study program:

- I: When you set the learning goals, for example, being able to talk about a functionalist house, it has a number of criteria. What do you need to master in order to be able to talk about a functionalist house? You create a checklist and it is also the assessment criteria, if the student has reached his goal. To get good criteria, then you need to know something about functionalist houses. I know

almost nothing about functionalist houses. I just guessed, but I was not far off. I just used common sense. Actually, this should be done by a building and construction teacher.

The second approach consists of *explaining the expectations* of the assessment criteria of the “intended learning result” to the student. The aim is to ensure that students understand what they are going to learn, although it is difficult to be 100 percent certain if they grasp it. This work had to be done, as it is a formal direction from the national educational authorities. But how it is performed rests on the will and choice of the teacher. The teacher in this study saw explaining the expectation of the intended learning result as a complex process that did not stop at the beginning of the school year, but had to be completed throughout. Here, the long-term and short-term are explained and embedded into the learning process. The long-term goals are often explained first, while the short-term goals are those that are discussed with the students, often at two- or three-week intervals. But student empowerment and democratization are difficult in practice. When asked what they wanted to learn, students are divided. Some are receptive, while others are indifferent. Others could state it is the teacher’s responsibilities to define the learning objectives, not them. This shows that goal-thinking itself is not a static enterprise, but constitutes part of a flexible adaptable and enforced regime.

The third approach consists of the teacher *mapping her students’ levels* prior to the start of classes. This was essential. It played a crucial role in determining what type of learning result could realistically be achieved from the “intended learning results”. This could determine the level in her classes. If this was not evaluated, the conditions for learning would not be fruitful. Essentially, coming to class and setting high requirements for learning meant that only a few would learn and the vast majority would fail. Hence, one has to adapt learning objectives to the level of the students, so that all had the possibility of enhancing their language skills:

- I: I can’t do anything until I see the class. Where are they? Like in the English class in vocational studies, I must start at their language level. I can’t demand anything more than that.

She mapped the students’ skills just after classes started by inspecting their work. Their text production gave insights on where to start. This is not always straightforward, as their ambition and motivation were also relevant. This was a challenge in the vocational class:

- I: It is their ambition. I can motivate them for higher aspirations, but I must also be realistic and see it in relation to what they wish to achieve. If you have any subjects, they are predominantly interested in construction subjects. There they hopefully perform better. And then there are some subjects that are “So, I only have to complete it”. And English is one of those subjects.
- R: So it has become a straitjacket for something they just are forced through?
- I: Yes, that’s one of the biggest problems in the education system.

The fourth approach consists of a *continuous management and maintenance of a dialogue with each student*. This involves short individual meetings between the teacher and each student, where they discuss the student’s progression and learning. The teacher asks the student what his or her goal is and what he or she needs help with to improve. Such meetings are also an opportunity to sense to what extent the learning goals have been achieved:

- I: It is three to four weeks between my topics. Then I think, what is the next topic? Now it is gastronomy or food, something like that. What is interesting for students? Yes, it is go to a restaurant. I think that a restaurant visit, it is oral. How can I get to do it, or simulate it? I can't take them all to a restaurant. We could not do that. We can simulate a restaurant visit. There are many ways to do it. Or, I ask them to go to GoAnimate, create or select characters there, phrase, restaurant, and then read the dialogue.

Strategy 4: Designing meaningful learning activities

The fourth strategy consists of designing meaningful learning activities. The learning goals are governing *abstractions* giving directions on what to be taught, but they do not appear to state *how* and *what* type of learning activities are to be staged in the classroom. This job belongs to the teacher. The challenge is making them align with the learning goals and embed with use of social media, where the learning situation allows it. In this study, the teacher's main goal was to create learning activities that reflected situations or experiences the students would meet in their ordinary life, happening beyond the gates of the high school. English and Spanish were adapted to fit to future work and education. This meant focusing on adopting and creating situations where the students would be most likely to apply the language. In the English class, the use of English was designed around learning activities making it relevant to the working day of a carpenter. The Spanish class followed the same idea.

Certain factors need to be considered, however, including students' prior knowledge of the language, their motivation, and expectations. This applied when setting the level of the learning activities. The students in the English class were assumed to speak the language well, while in the other class, the students had not been exposed to a Romance language and culture in formal education. In the English class, one could expect a high degree of student engagement, while it might play out differently in the Spanish class. Here, learning activities would focus on acquiring the language's formal aspects, like grammar, simple vocabulary, knowing how to talk about your family background, etc., meaning that the students would follow the standardized language progression for learning a foreign language.

Apprehending how the teacher created the learning activities, we can look at the competence/learning goals from the curriculum in English and Spanish. Considering English, these were legitimized from a subcurriculum having its own code, "ENG1Z05, Engelsk, Vg1 studieforberedende og Vg2 yrkesfaglige utdanningsprogram". The competence goals are divided into three themes: *language learning*, *communication*, and *culture, society and literature*. Under the theme *language learning*, the goal of the course is to enable the student to:

1. utilize and evaluate different situations, approaches and strategies for learning English
2. describe and assess the impact of various linguistic expressions
3. consider and comment on their own progress in learning English
4. use a wide range of digital and other means, including monolingual dictionaries, in an independent way

The goals for learning in the theme *communication* state that a student should be able to:

1. understand and use a wide general vocabulary and academic vocabulary related to a given study program
2. understand oral and written presentations on general topics and on technical topics related to their own study program
3. express themselves in a written and orally nuanced and precise manner, with flow and context
4. select and use appropriate reading and listening strategies to locate information in oral and written texts
5. select and use appropriate written and oral strategies adapted to the purpose, situation and genre
6. take the initiative to begin, end, and keep a conversation going
7. reading texts in different genres and with different purposes
8. write formal and informal texts with good structure and context based on personal and social issues
9. read and write texts with ties to a given education
10. select and use content from various sources independently, critically and responsibly
11. use technical and mathematical information in communication
12. produce complex texts in digital media
13. choose a specialization course within their education program and present this

Under the theme *culture, society and literature*, the competence goals state that the student should be able to:

1. discuss the social and cultural conditions, social conditions and values in several English-speaking countries
2. present and discuss international news and current events
3. account for the use of English as an international language of the world
4. discuss English language texts, from a variety of genres like poetry, short story, novel, film and plays from different parts of the world and eras
5. discuss literature by and about indigenous peoples in the English-speaking world

These learning/competence goals were translated and organized into what the teacher defined as *projects* and *work plans*. These were available on the class wiki site, and represented her way to work with *themes*. As well as general information on the wiki site, the project and work plans indicated the learning material to be covered across the year. These varied in depth and organization. Some lasted for a single class session, while others included teachers from other subjects, lasting for several weeks. Let us look at a couple of examples.

The theme “*project*” is a large learning activity, intended to last several weeks. It included significant organization. It was a cross-disciplinary assignment between three different subjects the students studied: Norwegian, English and construction. Consequently, the teacher collaborated with two colleagues, a Norwegian teacher and a teacher in construction. The learning activity coordinated and integrated competence goals across three subcurriculums. The students were to learn about two types of houses, commonly built across the country, so-called *funkis* houses and passive houses. The idea was to deep-dive into learning more about architecture, especially about how to build them and what makes them special to the environment. The students were to research, write texts, and present it orally by use of professional expressions in Norwegian and English. They could either work by themselves or in groups. The students could use digital tool after their own choosing.

Table 5.4 Excerpt from planned learning activities in the English class.

Designed learning activities		
Period	Work plan/Project	Social media software
Second half 2011	Safety, tools	Blog posts, the web
	English measurement systems	Online game Software
	In the news	bbc.co.uk, Al Jazeera English, CNN, NBC, Euronews, Norwaypost.no, Orange, Theforeigner.no, Facebook, Twitter
First half of 2012	<i>Funkis</i> houses	PowerPoint, the web
	In the news	bbc.co.uk, Al Jazeera English, CNN, NBC, Euronews, Norwaypost.no, Orange, Theforeigner.no, Facebook, Twitter
	Indigenous people in New Zealand, Sports in Australia	YouTube, movie, the web

“*Work plans*” were smaller learning activities. The teacher had divided them into following a sequential order, like “work plan 1, 2, 3, 4”. These varied in size and organization. The teacher planned to cover distinct themes related to carpentry. This included knowing how to describe safety regulations; to name common carpentry tools in English; and to understand the English measurement system,¹³ like knowing the difference between an inch and a foot, etc. Others included learning more about literature and how to address social issues in literature and film. This theme was organized around post-colonial issues, like understanding how indigenous peoples struggle with aspects of the modern world, illustrated through the experience of the Māori. The teacher intended to use a variety of digital tools, like online games and general use of the Web. The students were also assigned to write short texts, based on the themes they covered, submitted as blog posts.

The teacher designed a large repetitive learning activity called “in the news”. This was a complex undertaking, organized as a type of class news session. The students were to browse the media landscape for news for 15 minutes and update themselves on what had happened. The students and teacher would together examine the news stories and critically establish the larger *context* behind them, by asking a series of questions on *whys* and *whats*. This was designed to exercise critical literacy, and embodied her goal to teach the students to see connections between the dots of unexplained pieces of information they interacted with. An excerpt of the planned learning activities is displayed in Table 5.4.

In the Spanish class, the teacher also followed the same idea. The competence goals/learning goals were legitimized from a sub curriculum with its own code, PSP1-01, which also follows the three-fold division: *language learning*, *communication*, and *culture, society and literature*. Under the theme *language learning*, the goal of the program is enabling the student to:

1. utilize their own experiences with language learning in the learning of a new language
2. examine similarities and differences between the mother tongue and the new language and use this in their own language learning
3. use digital tools and other means
4. describe and assess their own efforts to learn a new language

¹³ Also called the “imperial measurement system”.

The goals for learning in the theme *communication* states that a student should be able to:

1. use the language and alphabet characters
2. find relevant information and understand the main points in written and oral authentic texts of different genres
3. participate in simple, spontaneous conversation
4. present various topics orally
5. express their own opinions and feelings
6. understand and use numbers in practical situations
7. communicate with understandable pronunciation
8. understand and use a vocabulary that covers everyday situations
9. use basic language structures and forms of cohesion
10. use the language so it can be used to some extent in various communication situations
11. write texts that narrate, describe, or inform
12. use listening, speaking, reading and writing strategies adapted to its purpose
13. use communication technology to collaborate and interact with authentic language

Under the theme *culture, society and literature*, the competence goals state that the student should be able to:

1. talk about daily life, people and current events in the language area and in Norway
2. compare some aspects of the traditions, customs and ways of life in the language area and in Norway
3. conversation about language and aspects of geography in language area
4. express experiences related to a language area's culture

The learning/competence goals are translated and reorganized into *themes*, which were available on the class wiki. The use of *themes* followed another concept, involving being organized around the progression of small activities, lasting from one class to another. These were carefully planned. The learning activities were not organized as large projects, for example.

Table 5.5 Excerpt from planned learning activities in the Spanish class.

Designed learning activities		
Period	Theme	Software used
Second half of 2011	Basic introduction of yourself in Spanish, age, family background, etc.	Blog and YouTube
	Dialogue, address someone they do not know, talk about life and the weather, etc.	Blog and YouTube
	Contemporary society, culture and tradition	Blog , PP, the web
First half of 2012	Spanish geography	Blog , PP
	Musical expressions	YouTube
	Engagements with written texts	Blog

The teacher divided the learning material into themes following a sequential ordering, like “theme 1, 2, 3, 4, 5” etc. The students were to cover seven to eight themes throughout the year, some in the fall of 2011, while the rest were to be part of the syllabus till the summer break. The themes dealt with basic issues around introduction to the Spanish language. The students

were to learn how to introduce themselves, tell their age and explain family background, how to conduct a dialogue in Spanish, address somebody whom they do not know, talk about life in general and the weather, and be able to decide something. The students were also to learn about contemporary Spanish society, culture, traditions, and geography. Some themes explored the cultural meaning behind the language. Such themes were organized around small learning activities, where the students browsed the web for information and made PowerPoint presentations and published their assignments on their blogs. Many classes used YouTube videos extensively. An excerpt of the planned learning activities is displayed in Table 5.5.

In sum, the data analysis has attempted to contextualize how the teacher organized and designed a blended learning environment, called *authentic learning situation*, which I suggest can be underpinned by a “*reflective-technology-in-practice*”. This can be seen as a socially constructed technology structure. In essence, it is an organized projected script. The attributes characterizing it are how the teacher uses, redefines, and reframes various network technologies in new ways, perhaps creating an emergent technology structure to work with foreign language training in an educational context. We see little trace of an ICT technology “pushed down” in the school hierarchy requiring adoption. We have learned that the teacher is motivated by creating a textbook-free classroom environment. The teacher has relative autonomy and flexibility to do so, which is enforced by setting up a technology-rich environment, where she “imports” or “shops” a variety of social media services onto the organization’s turf. Moreover, she organizes her design in relation to them. But realizing it demands a partial decoupling from institutionalized practices and reconnecting to the learning environment she constructs, which is based on her continuous reflection as a professional. This requires managing a set of additional strategies. First, one must engage with the technology and establish what social media technologies fit the intended practice. Second, engaging this way involves having defined learning strategies, as one has introduced new logics, frameworks, and conditions as premises in the learning process. Third, one is also challenged with embedding and administering competence goals and learning goals, due to the fact that a knowledge production process is to take place. And fourth, one needs to design meaningful learning activities and to coordinate them across an academic year.

5.5 Part V: Enacting authentic learning situations

This section focuses on the experiences from the implementation of authentic learning situation in the teacher’s classes. My goal is to analyze the teacher’s enactment with her model, assumed to emerge from situations in the classroom. I examine distinct learning activities and themes, which came to dominate her practice. I pinpoint recurring and constituting patterns, which can be recursive or have the potential to become routinized.¹⁴ I try to frame that by use of a processual perspective, to display distinct elements in the phases in a structuration process of new technologies in an educational context. To narrate this, my analysis is constructed around a linear storytelling, starting with how the teacher’s classes unfolded, based on a month-to-month progression. This begins with August/September 2011 and ends with March 2012. The account is descriptive because I believe it is a rather simple way of grasping the nuances manifesting in processes, but also it allows us to understand potential changes that might take place in them.

The two first months are called the “introduction phase”. This period shows the strategies the teacher used to introduce her students to work digitally, how she established classroom presence and connected with her students, and introduction to the first learning activities. The third month

¹⁴ The ways I have coded are outlined in sub-section 2.4 in Chapter 2.

is called “challenges in stabilization”. This month demonstrates the practical challenges the teacher met when attempting to work with classroom culture and motivating her students to use social media tools and to participate in her learning activities. The fourth month is called “unexpected enabler of audio-visibility”, which is a period displaying that certain social media services can have a positive and unexpected influence on classroom practice. The fifth month is called “the halfway assessment”, which is the teacher’s evaluation of a semester with two classes. Here, she evaluates how the students accepted working with social media in foreign language training. The sixth month is called the “turning point and standardization”. This month shows her experiences with how her classes and learning design have become socially accepted among her students, but reveals that she is faced with motivating her students to engage with her learning activities. The seventh month is called “collaboration and self-organization” and shows that her model has become more routinized, allowing her to work with examining the meaning of students’ capacity to collaborate and be self-organized. The eighth month is called “assessment” and focuses on the learning results she has achieved after eight months of teaching.

August/September 2011: The introduction phase

The first time I accompany the teacher, we meet in the teachers’ lounge at the high school, a Wednesday in the middle of August 2011. The two-month summer break is over. I have arrived 10 minutes prior to the start of classes. She offers me a cup of filtered Friele coffee, the standardized cultural beverage that so many Norwegians consume at coffee breaks. We fast-drink it. She arrived an hour earlier and has planned her classes at her desk. She is eager to discuss her design, which is so common among her peers. Teachers continuously evaluate their practices, look after their students, are accommodating, and are expected to be sociable. They work with navigating through the complexities of social relations and human emotions. They share and give much of themselves. She is no exception, is talkative and expects comments. I try to come up with something intelligent, but I mumble in my efforts to give her advice. It is difficult, although I have worked as a teacher and have researched the K-12 system from behind a research desk. I do not know what to respond. I hesitate, but it later becomes obvious. I lack the in-depth knowledge and experience of practicing as a teacher in a classroom.

There is slight excitement, as she has not yet met her vocational students in the English class. She knows almost nothing about them, besides their names. They are 15 male students, no females. She appears curious and is very keen to figure out how to approach them. Teaching vocational classes is assumed to be challenging, especially in the compulsory academic subjects, like Norwegian, math, and English. The teacher has concerns, as it can set premise on how receptive and motivated the students are to learn. She has previous experiences, which are mixed. Soon our expectations become a reality, as we set course for the classroom, which is located downstairs. We pace down the stairways. At the end of the corridor, there is a group of males, who either sit or stand. They talk aloud and stare at us. We stare back, while we pass them. The teacher unlocks the door, while she makes small talk with them. We all enter the classroom. There is a typical classroom sense to it. Chairs and tables are spread out in some random order, a typical sign that the classroom has been used earlier the same day. The English class is the two last hours of the school day. We enter at around two o’clock. The class lasts two hours, until about 15.30. The students sit down and open their laptops. There is a mobile socket distributor with attached small wheels, standing in the middle of the classroom. The students use it to power their laptops. The teacher introduces herself and me to the students. The students do the same. The teacher explains the objectives of her class and that they will work digitally. From such a spatial recurring context, her local model will be enacted the next year to learn English and Spanish by use of social media.

Different learning activities are scheduled for August and September. All the students are going to blog regularly about their assignments. The students in the English class are going to introduce themselves and write posts about topics related to working in carpentry. The students in the other class are going to do the same and perform grammatical exercises and write simple dialogues. The English class is to start with the learning activity *In the News*.

Building an image of the students and creating a positive learning environment

A month into the school year, the teacher is faced with a distinct pattern of classroom management. This expresses itself in different ways like getting to know the students, performing the role as teacher, and practicing affirmative teaching. But one stands over all others, *creating a positive learning environment*. To accomplish this, she attempts to enact strategies that emphasize motivation and mutual respect between the students and herself. She wants to guide them toward success, by helping them to see how their efforts can pay off in the classroom. But to do so, the students must be able to feel safe, which can enable trust. There must be a positive feel. And when that occurs, they will be more receptive to learning. Ideally, a positive learning environment will transform a classroom into a community of self-organized students. Her task ahead is to socially *invest* in ties and manage them accordingly. If this is not set, it makes little sense working with social media. In fact, it is imperative.

But the teacher's efforts are contradicted, as she learns that the classes are poles apart. The Spanish class is seen as "silent". She can invite engagement, but seldom gets replies. The class culture is interpreted to be formed by a youth conformist uniform, where she believes it is taboo to stand out. She senses that bullying is an issue, lurking in the background, something that can work against the positive learning environment she wants to create. She will address it by organizing a class session. The conditions in the English class are different, perceived as "challenging". She has to overcome low student motivation and language level. The students master English orally, but struggle to write it properly. She sees it as her objective to help them, to teach them to write and structure texts in English. At the end of the year, this is what it will be all about, a full day exam, where they will have to write long texts. But some of the male students have managed to gain a degree of premise control, these she is getting to know:

R: How would you summarize today's class?

I: Today? It goes. If I think about my previous experiences I've had in vocational classes consisting of 30 students, it's stated that they don't like the subject. But there is no one who says that the subject is hopeless and is negative to the subject. In that regard, I think that's positive. At the same time, there is gradual learning. There are some who submit, they have an ownership to what they do. But, I struggle with that "quartet". If they haven't been there, it would have been a completely different class. I go around, somewhat, angry, like a bad-tempered woman. I don't really want to be like that.

I: I guess you've been in similar situations before. How have you solved it?

R: The starting point is my personality. It goes to a certain point and then I get really angry. I can't get really angry yet, from what I usually can be. When it gets to that level, I can get really hard. Afterwards, they were quiet, but I don't manage to create an atmosphere, where they contribute to learning and want to talk. Then it gets hard. I see that those three, or four, he was the fourth one, he has not been exempted yet, he will not be there. His motivation is zero. He's just storage. He has completed a course in English before and has finished it. So, he just sits there. It is also a bad factor. It is the school's responsibility, but they haven't organized it yet. Until he gets an answer, he just has to remain here. The other

three students struggle. As we talked about earlier, they are students who failed in English.

R: But when you've been in these situations before, what have you done?

I: I have several options. I can enter class and be angry. It's not my personality. It's not particularly nice for them, nor for me. That's not what I want. There is another possibility. I can break off. Take them out of class. I can go to the Head Master. That's a person who comes, if we consider it necessary. I can contact their main teacher and say that he/she will come to my class and talk. That's the way we work together on the students. But that gets a little drastic.

R: They're almost 18 years, adults?

I: Yes, they are. When I go to class, I expect they are there to learn something. But they are still juvenile. They see this as something mandatory, not because it's something they have chosen by themselves.

R: You are powerless in all this?

I: Partially. I can do something. But it's very difficult to get what I want, because I want to treat them as adults, by having a positive attitude. I do not want to bring in sanctions, which they perceive as "the teacher gets mad, the teacher punishes". I don't want that. I would like to work with them, before I make contact with their parents, etc. I have many opportunities.

R: How common is it in high schools?

I: Fairly common. According to the regulations of the Education Act, we can contact the parent. There's something called "cooperation with the home". This will be done when they are under 18. It's properly authorized, in terms of the legal framework. Some parents react to that, but when you start talking to them and say that you want your son to do their best. I want us to work together on this. They don't experience it as a complaint on them as parents. It's possible to talk to them and get help.

This transcript is an indicator of what is to come, but will later diminish as things settle. She will be involved in a "symbolic power play" where a couple of the male students attempt to push her personal boundaries. It is not about losing face or control. The students, perceived as the "quartet", take a dominating role, making their contributions contradictory. They create noise by random shouting and tossing ironical and sarcastic comments with little interest in creating a reflective conversation, but some of this is a response to her invitation to participate. She engages back in a new way, since the misbehavior works against the goal of creating a positive learning environment. She approaches this by speaking to them individually. They step outside the classroom, where she and the students can talk with no interference. Now, they are different persons. She has good conversations with them and learns about their motivation and how she can help them. Many struggle with writing English properly. And this is where she establishes that they need assistance. But when they return to class, they slip back to the character they just left. She assumes that this is a reflection of personal insecurity and a bullying issue. She also believes that many students put on a tough character or remain silent to avoid exposure to vulnerability. She starts working with that.

Decoupling and reconnecting to the appropriate technological frame

The flipside to the above is that a rich technology environment can enable and inhibit action, as it somehow influences the premises. The school's wi-fi network is sometimes inoperative and web pages take too long uploading. Another problem can be that the teacher and the students can bring with them different expectations and social media behavior to class. From the teacher's perspective, it is difficult to ascertain what the student is actually doing behind

their screen. The only thing observable is the laptop lid and a blue illuminated face, but they are engaged in socializing. Although Facebook is blocked, the students circumvent it. In the Spanish class, the students discreetly chat with friends on Skype or text an SMS, while this is overt among their older peers in the English class. In many situations, they deliberately game during class, where a motorcycle and a ski-jumping game are the favorites. In a way, this behavior should work to the teacher's advantage, as they should meet on the same turf, a teacher interested in social media connecting to students experienced in technology. They could share the same "technological frame", but in that case, she sees it otherwise:

- I: Use games? That's the challenge. If I run a blueprint that is very educational, the quality and motivation will decline. It can turn into a fake copy, compared to how they usually play. Some items are there. I can't use World of Warcraft. It's bad use of time. If they spend 15 hours at home and I use 20 min, then it becomes too small. It is something they do at home anyway. It has to be a supplement, compared to those types of games. But then there are the games that are made for education. It is possible to try it. When you say to take games into class, do you think the original game they play or educational game?
- R: I think, use of resources. They represent a resource, whether it is good or bad.
- I: It's a good resource. But I think with that particular resource, they manage and make use of it outside the school. It is also a way of being self-organized. I think that I will not give more of the same. They manage that themselves.

The transcript identifies an important theme; inviting and motivating the students to be inspired to work under a different technological frame, the participatory culture of the web. But experience tells her that students are *passive* consumers and accustomed to a print approach or Web 1.0 frame. They are socially disciplined into abiding the logics of the textbook's stability and linearity. They are in "read-only" rather than in a "read-and-write" modus. If they are in a Web 2.0 frame, they relate it to social and leisure activities. Furthermore, it is associated to be part of the private sphere and performed in social networks where the people interacting' know each other well. To have a successful educational use of social media, you have to decouple and reconnect its embedded *context* or *situation* on how it is normally used. In the case of gaming, this can be adapted, but one needs to managed its meaning and extended spatial context. Gaming is usually part of a time-consuming context lasting for hours, and includes collaboration and participative immersion in a virtual story where the gamer is a character within an imagined setting. But it belongs to the leisure sphere. When used in an educational setting, conditions change and another logic sets in. Lessons are shorter and one is confronted with processing information and experiences intended to lead to formal knowledge. One needs to satisfy another type of performance. To use gaming in an educational setting means to work with social media under a different technology frame, which is seen as demanding to achieve:

- I: Yes, that is the question. What is the framework for understanding "school" and what is the understanding for gaming, which in a way belongs to the leisure sphere? I think that it belongs to that domain. You make it into an educational domain. You can use a game for learning, but they are not interested anymore.
- R: Have you asked why it is so?
- I: No, it's not school, it's not leisure. It's defined by the school context. So we can't game. But I can use the game mindset, on the other hand. My conclusion is that when run a language game, the quality is less than what they are used to. It's too bad quality. And then there's something schoolish in those games. It's not the same thrill. It's not school, but hobby and interests. There's something about the setting there.

Despite such challenges, the use of social media brings surprises in the form of what takes place in *small situations* in the classroom. Many are staged by the teacher's activities. Others connect to initiatives the students carry out themselves. They often tend to have recurring attributes, but manifest differently. YouTube videos will serve as an unexpected trigger that motivates students to pursue clues, either as part of informal or formal learning activities. YouTube videos will prove to be valuable, as an enabler that motivates students to retrieve and reflect on user-generated audio-visual content by themselves. Moreover, beyond the teacher's control and thought, the students relate the content they have just retrieved to their own experiences, which happens as part of curriculum based-learning activities. YouTube videos will evoke engagement and reflection. YouTube's capacity depends upon its ability to ignite ideas, develop concept understanding and concept formation and contextualize experiences. YouTube content will prove to be more than just passive consumption for entertainment purposes, but to be an instigator to spur discussions. This will emerge as an unexpected benefit, perhaps creating a technology frame that renders the participatory culture of the web. On the other hand, social media will tend to transfuse with social practice and create odd situations:

- I: One of the students is different than in the start. He's no longer interested in making noise together with the others. At the end of day, it turned out that he has written quite a lot, while he was "gaming". I have cracked the code on him, as long as he stands it. Sometimes he'll take a 10 minute break. And, then he just slips just out of character. But the last time he had a positive contribution. I have gone further with him, but he slips out sometimes.

The transcript is about a male student in the English class. Typically, is how a schoolwork activity is mixed with a leisure sphere activity, taking place in the middle of the classroom. Many male students work this way. Gaming will act as a type of "escape break", where they move back and forth between learning activities. In the Spanish class, this was also visible, but performed more discreetly, as they chatted with friends on Skype.

A learning activity: "What's in the news?"

In the News is an important self-designed learning activity the teacher attempts to introduce and institute for the year to come. It is aimed at challenging the students' assumptions on reality. She wants to explore concepts by critical thinking and make the male students in the English class see patterns behind the information they traverse each day. Practically, it is organized as a dialogue-based news round. The teacher and the students engage in structured discussions, formed around the latest headlines from the Norwegian and English news services. They take on different roles, the teacher as the moderator, the students as co-participants. She plans to have it at the start of every class and is scheduled to last 10 to 15 minutes. The news round follows a procedure. First, the students are given five minutes to browse and retrieve news stories by themselves. The teacher suggests web sites they can visit. This would be done in silence. Second, they would engage in discussion. Sometimes the students would be asked to read aloud the retrieved stories. These were intended to be discussed in front of the class in English, so that they could practice the language orally. Other times she would encourage them to perform "share-among-peers", where they first talked in groups before presenting their conclusions to the rest of the class. The teacher challenged the students to go beyond the news, by asking them to focus on three questions beginning with "w": "what", "where", and "why". The aim was to encourage them to understand the importance of the *context* behind the news, enabling them to connect pieces of information to see a larger picture. To what extent she perceived that students engaged in this, however, would be evaluated by the quality of the discussions. She uses the term "reflection" as a parameter to establish the success of a session.

During the first month, the students carry out the instructions. They browse and retrieve stories. But they merely read out loud what they find, rather than engaging in a reflective discussion stating their own opinions or reflecting a will to be keen to learn more about the context. The students address the news in their mother tongue, in some cases in English. The teacher speaks back in English as much as she can. She tries to tempt them to reflect and speculate in the important “why” behind the news. She sometimes gets an answer, but realizes that it will take some time to establish it as a regular practice:

- I: I think that the news round is going well. I think I manage to give them a general education, so it goes in the right direction. If they get small drops for a whole year, it will add a whole so that this becomes a basis to stay updated on the news, like adults. That's what I want. News is also one of the most important learning objectives. I feel that they think it's ok.

The teacher realizes that creating a structured news round is contradicted by various factors, which can work against the goal of creating reflective students that question social conditions. First, low motivation and incidents of student behavior disrupt the exercise. She senses that some students are not interested in contributing, as bullying is believed to be a concern preventing the realization of a positive session. This influences engagement. Second, she is self-critical of her own performance as moderator. She discovers that the students have challenges in connecting the news to a larger picture and lack depth. She expects quick answers and sees that she has to take a slower approach when asking questions. She realizes that the students have challenges in “decoding” the information and reflecting upon it. Third, she realizes that students are reluctant to share knowledge. The male students are not used to practicing a “think, peer-share” approach, where they discuss the news among themselves first, before addressing their thoughts to the rest, something she observes in her other class:

- I: In my Spanish class, it's like “think, peer-share”. I ask a question. They think about it and share and share it in class. Two working together and we'll get the whole class at the end. You know what I mean? I ask a question, “What's in the news?” I ask them to read first. It is the silent period. And then I ask them to share with the person and what you have found. And then we take it in class. In that group, I think I never manage to get two students to speak English together. I highly doubt it. But if I lead the discussion, so I get them to speak English. I'll try that next time, to take it down, spend more time on reflection. Maybe it helps. But the pace is all part of the control in the class there.

Making prosumers: getting on with blogging

Another self-designed learning activity is introducing the students to blogging. The students are to blog regularly to enhance their writing skills and perform reflective writing. The students are to blog in English and Spanish throughout the year and publish their assignments as blog posts. Her motivation is to turn them into content producers of digital items. She wants to teach them to engage and share, so that they can relate and participate in a community of practice. Doing so involves changing their technology frame, from a Web 1.0 or print approach to a Web 2.0 regime. Her experience tells her they are *passive* consumers of online content. She wants to motivate them to becoming *active prosumers*, changing them from *web readers* to *digital writers*. But getting there requires patience and is a time-consuming process, involving repeating the same practice over and over again:

- I: My goal is that they should be able to structure a text, to structure information from the Web into their own thoughts in a text. We must do that a thousand times. The first assignment was the “hammer”. Now, they are to blog about a person they admire. Then, they are going to write first and then talk about it afterwards. But then the question remains, do they dare going up there, and talk about it in front of class? Some will do it.

Blogging has been successful in her previous vocational and academic classes. The students are first skeptical, but go along with it. To blog is a barrier for anyone who interacts online. She is aware that blogging suspends anonymity. The challenge is to motivate her students to publish their assignments on an individualized platform. To publish one’s own thoughts bears little risk, but your schoolwork is something different. What you publish becomes visible to an unknown audience. There are risks with blogging. Digital content can be abused. A solution to this challenge is to practice self-censorship, where you avoid participation. The students can use this strategy and refuse to blog, which she is starting to experience:

- I: Yes, especially those who haven’t submitted. One student says he has written the text, but hasn’t submitted it yet. Why will he not submit? One of those students, I believe, has been told to “keep quiet”. I think many teachers have said that to him, experiencing it all the time. It’s no wonder he hasn’t learned and it does not help him. I don’t know what to do with him. I think that he has been shouted at so many times. And that is not my way to go about it. I try with respect. Each time he contributes with something, I give positive feedback. One can’t focus on the negative, but one has to build up the positive, his self-esteem and respect.

Table 5.6 Excerpt of blog entries in the English class, August and September 2011.

Student	Month and number of blog entries	
	Aug. 11	Sep. 11
S1	2	1
S2	2	-
S3	1	2
S4	2	2
S5	-	-
S6	-	-
S7	-	-
S8	-	-
S9	-	-
S10	-	-
S11	-	-
S12	-	-
S13	-	-
S14	-	-
S15	-	-

The teacher is confronted with motivating students who have poor learning experiences in English from their previous schooling. Some are “failed students” and their learning experiences fall in her lap, influencing the blog project. She has to readdress her learning strategies and learns that other male students are not submitting their work. The blog project has had difficult start; 11 of the 15 students have opposed it and refuse to blog. Only four students have created blogs and only three of the four students have published entries. They blog in secrecy and anonymously and use false IDs. The teacher has permitted them to do so. The students who do not blog can submit either by written text or on the school’s LMS. The blog posts cover topics explored in class. The posts are about presenting themselves, a text

about safety in the workshop, and an essential tool that every carpenter uses, the hammer. There are no comments on the blogs, besides ironical comments. A student writes for example: “Yo, just chillin at school :)”, which is responded with: “nice man, nice, im just crackin! : :)”. This situation is new to the teacher. She has never experienced that students, in either vocational or academic studies, have opposed blogging. Blogging will surface as an issue in the next months. An excerpt of the blog entries is displayed in Table 5.6.

In the Spanish class, the blog project is up and running: 16 of the 17 students have created one each and post entries. A female student publishes all assignments on a wiki. All the students blog under their own full names. Some students were skeptical, but soon realized that very few will ever read their entries. Two months into the school year, they have published small assignments. These are introduction of yourself, a short story about your family, simple conjugation of important verbs, vocabulary, etc. You can observe that students differ in how much they publish. There are seldom signs of any commenting on each other’s blogs. Commenting happens in front of the screen, where students make simple evaluations. Things are going well and the teacher is content. An excerpt of blog entries is displayed in Table 5.7.

Table 5.7 Excerpt of blog entries in the Spanish class, August and September 2011.

Student	Month and number of blog entries	
	Aug. 11	Sep. 11
S1	1	9
S2	3	7
S3	2	7
S4	2	4
S5	-	4
S6	2	5
S7	2	3
S8	2	2
S9	Published on wiki	
S10		
S11		
S12		
S13		
S14	-	1
S15	2	7
S16	1	3
S17	2	1

Framing initial recursive patterns

Two months into the school year, we learn about particular themes. The students respond differently to her model, meaning the development of two dissimilar learning environments. The design is up and running in the Spanish class, but struggles in getting a foothold in the English class. We learn that managing social relations between the teacher and students is important. To create trust in ties and have a positive classroom atmosphere is imperative. Her reflections from successes and non-successes on recent events develop into a source on how she works. She is keen to exchange opinions about her actions and learn from them, so that this emerges into a factor on how she organizes her work. Here, she concentrates and speculates in what “worked” and “didn’t work”. She is not afraid to fail, but likes challenges and to push herself. She is keen to know how she can improve and deal with various issues, as she will have to face them on a weekly base until the Christmas holiday sets in.

The term “reflection” is continuously used in my interviews. It surfaces as a source to establish patterns and make sense of what is going on. The teacher is interested in getting her students to

use the same capacity. By reflecting on her practice, this establishes how to engage and motivate the students in the English class. Here, the challenge is to overcome low student motivation, which can jeopardize her design. She considers various strategies to overcome low student engagement. One consists of reseating them and giving them permanent seats. Another is to talk with colleagues and learn from them. She also considers introducing other web tools fitted to the work of the carpenter. She has had experiences in using the 3D modeling computer program SketchUp, which is commonly used for architectural and interior design. Perhaps that will work. Another is to use the discussion forum painterforum.com or multiple choice software, but she concludes that they are incompatible and afraid that the students will find them tedious. There are also contradictions with the male students, which she finds hard to grasp. Many are well versed in English. Many of them are used to gaming and have learned a substantial vocabulary, but few are interested in showing it when they work in groups or stand in front of class. When she asks them to read a passage from the textbook, some always volunteer. She perceives them as self-organized and independent, but they appear not to want to show it, something she observes in the other class:

- I: These are self-organized tasks, because they are individually designed. It's a completely different starting point in the Spanish class. There I have students with a different starting point. Here are the tasks and you yourself choose what you want to do. The goal is not to do the tasks, but to say, "Now, I have learned it by doing this assignment". They work independently. They choose the task and then I can talk with them afterwards. So, they have a completely different drive and there is enough motivation wanting to learn the subject, partly. I think that some the students in the English class can do the same.

This brings up a rather thorny issue, returning to work under a textbook learning design. This means to organize classes by reading from the textbook and doing assignments. In effect, this would mean abandoning her social media practice. She does not want it, but it emerges as a condition she might have to face. Her experience tells that when teachers struggle with student misbehavior, they often turn to the textbook and a behavioristic learning approach. The textbook gives control over the premises. This implies that working with a learning social media design suits highly self-organized and independent students. But if they are not created, this has to be realized so:

- I: In the beginning, most teachers will probably use a behavioristic approach, so they feel that they have control. Once you start letting the control go over to the students, it means that one must have very clear direction and framework. They must be laid before the student is given the responsibility to be independent. It takes more experience to make it go well. You may well give them a project assignment, but it only turns into chaos. And many have experienced that. To make it work, this requires a lot of experience, control and structuring in advance, reordering and understanding of what the context the student interact and belong to.

October 2011: The challenges in stabilizing

The teacher has planned certain learning activities in October. The students in the Spanish class are to learn how to present their closest kin. In the other class, she continues with the news session, but decides to start a new assignment, a project. The students are to make a short video about a topic related to carpentry.

The continuing work with creating a positive learning environment

The teacher continues addressing the work of creating a positive learning environment. The bullying issue in the Spanish class is attended to. She organizes a class session and senses it pays off and the classroom environment improves. In the English class, the same is detected:

- I: Since we started, I would say that the classroom atmosphere has improved. I feel it's more comfortable to be in class. And it was also the case, the last time. I've managed to work my way up, to make a better classroom practice.

But the students divide themselves into two factions. This is observable when classes start, as the same students tend to seat themselves accordingly. They find an available table located at the rear of the classroom and sit along the right and left side of the walls. This makes work challenging. She wants to bond with them and thinks she is starting to "crack the code on behavior". The students hide behind a mask of low self-confidence and use noise to conceal it:

- I: This escape into the computer, I think it is because of that they do not feel very safe, considering the subject and other aspects. Yelling is not the way to go.

She wants to practice affirmative teaching, which means having a positive approach. The students must be motivated, not being reminded of previous mistakes, but that they can reach a goal in collaboration with her. This means she deliberately omits negative feedback and ignores correction of grammatical errors. Performing it will have opposite effect and is a strategy to work against them. She senses it pays off, as some of the male students with low language skills lower their guard and submit their assignments:

- I: They begin to see that there's nothing dangerous about submitting, you will not be hammered. You don't get negative feedback on what you write, but constructive criticism.

She works with small issues. This is about finding openings, which is intended to make the students more receptive to accept her help. It is a social role play. She works on an advanced level, requiring the development of strategies based on reordering, intervention, and helping. These have multiple meanings and connect to the need for premise control and to make the learning goals tangible. She works across two axes. The first targets the students individually, while the second aims at getting them to work together. Individual conversations are carried out in private spaces, in the corridor, an unused classroom. The conversations allow her to talk to them one-to-one. The students show a different side. They lower their guard and talk openly. This is a way to approach students who misbehave. She maps how she can help them. Individual tutoring is used extensively and seen as a success.

The video project and the challenges with collaboration

The teacher starts a new assignment in the English class. It is organized as group work and is a project. The students are going to make a short video, about a topic related to carpentry. The students can make a video on a topic they choose themselves. The project is intended to last for three weeks. The end result is to be a short video, which is to be presented for the rest of the class. The video has to be in English. The students use video cameras on their smart phones and open source editing software to cut the raw footage into a video. Prior to making it, the students have to write a project plan for production and submit it for approval. The teacher has not set any restrictions on whom the students can work with. The video project is a test to find out how

well they master collaborative learning. She is interested in establishing to what extent the students can receive instructions, find a common goal, implement it, without her intervening and giving them too much direction. This is seen as an essential competence in work life and is imperative in order to work with social media.

The project becomes a challenge when first presented. The students connect with familiar ties. The quiet students form a group, the quartet as another, and the rest join a third one. The first task is to come up with a plan on how they are going to make their video. I am present in one of the groups. The teacher helps another. The groups work differently. One group manages to produce a plan at the end of the first lesson, while the two others are not working appropriately. The one I am present in is unstructured, but the group work forms a process. First, the students only partially seem to understand the instructions. The teacher has explained them two or three times, only a few feet away from where they sit. They are distracted by their own small-talking. They hesitate and lack the initiative on how to organize their work. It is difficult to get started. They are inside a “resistant bubble”, which fails to detect her instructions. They are more interested in cracking jokes. In the second phase, they do not manage to come up with a decision on what to do. They stall, but have been given absolute freedom to do whatever they want to do. Ideas are lacking. They make small talk and show little willingness to initiate the assignment. It is a third stage. One student, who dominates the group, attempts to exercise authority over the others. There are signs of negotiations on how to “outsource” the assignment, where a student is trying to delegate all work and responsibility onto another student to produce the plan. Another student tries to come up with suggestions, but is overruled. Discussions arise and each student tells the other to keep quiet. No plan is produced after the first lesson. It is an easy task and should not take many minutes to complete.

In the course of the video project, however, all groups eventually produce a plan. However, they all choose to do exactly the same – conduct an interview with one of their teachers in a subject in vocational studies. In the next lessons, the groups write an interview guide. They get advice on interesting angles and set off to find their interview subject. The videos are quickly edited. At the last week, they are all screened for the rest of the class. There is a group discussion and the project is concluded. For the teacher, the project has been part of her “trial-and-error” practice:

- I: Now, I try it out with this project. It’s trial and error. I’m not afraid to fail and it’s a normal class. One of the students, who sits there, thinks it’s great to make a video. His group has been allowed to do it. He thinks it’s fun and says he’s good at it. But how he’s motivated, just by sitting there with the pencil and the sheet, I sometimes get completely frustrated by it.

The reflection is part of a larger theme dominating the English class, the lack of student motivation. This is a condition she strives to obtain, being part of the larger plan to create the positive learning atmosphere. She uses the terms “intrinsic and extrinsic motivation” to conceptualize if she is on her way to realize it. The result from the video-project is no surprise, as she perceived the work of the students to be more motivated by duty (“like-getting-the-job-done”) than enjoying doing it to learn English. She knows that teachers struggle with getting students to collaborate and it takes time to make them self-organized. But when motivation is lacking, it is demanding to encourage students to carry out instructions and deliver their assignments. The video-project shows various sides on being the chief moderator of such an activity. She cannot intervene too much, as this would contradict the purpose of making the students see the value of working with others. They have to experience it from their own actions, implying that she has to hold back and not instruct too much. On the other hand, when

overseeing group work, students differ in how well they manage it. Some students carry out their work promptly, usually this is the proficient students. They turn goals into finished assignments. Students with low motivation can easily become distracted, as they can use the freedom embedded in collaboration, to engage in activities that are not relevant for the task at hand. This implies risks and dilemma in transferring responsibilities to students in collaborative learning activities. In some cases, this can drain teachers of their energy:

- I: There are those who need to have a teacher glued on them. You have to sit with them, otherwise nothing happens.

The video-project confirms that collaboration requires she should intervene and build up students who can fall out from this type of schoolwork. She is therefore confronted with doing a lot of “pushing” on them. She has to be proactive and stimulate their motivation and not give up, in order to produce a norm, a learning culture that stimulates sharing, interaction and participation. She has to work with the students’ social skills and competence in classroom, as it turns into an imperative prerequisite to interact online:

- I: I think that it’s important, when you consider social web, to work socially, to get close relationships. It helps to build confidence and master feelings, when you get it confirmed. If I say that the whole class did a great job, then nobody would accept it. If I say, “Look at this, look what you achieved”, it is pretty obvious.

The news getting out of control

The news round is up and running. The session starts at the beginning of most classes, lasting 10 to 15 minutes. The session shapes a routine. The teacher asks the students to browse suggested web pages, like the BBC and Norwegian online new sites. They spend some minutes doing that, before she asks them about their search results. Sometimes the students are reluctant to address them. They focus on reading aloud the headlines and the lead paragraphs. If a story is read out aloud, it is often said to have been “taken”, another student is then asked to tell about a different story, reflecting little motivation to deep-dive into exploring a concept in detail. Establishing a structured discussion in English is challenging. The teacher has to motivate them to get it going. She attempts to challenge them to speculate on “what is the story behind the news”, if they know the important context in which the news is an integrated part. She can meet with silence, but one or two students regularly respond with short sentences, often in Norwegian than in English. Such patterns confirm her suspicion. The students can retrieve information, but they need help to contextualize it:

- I: I know that. I know that info retrieval requires background knowledge and vocabulary. They have enough vocabulary to understand a text, but they have no background knowledge needed to read between the lines. And that’s what I try to give them, the reflection. Instead of giving them the answer first, they read it, I try to run it the other way, to motivate them so that they want to go back and find out what caused it all.

The session goes well, but it can have the potential to get out of hand, and one does. The students are asked to browse the news landscape. Their attention turns to a theme given wide press coverage. The press has focused on a series of sexual assaults against adolescent Norwegian females, happening in Oslo. The media implies that perpetrators are Afghan asylum-seekers. Semi-urban vigilante grassroots movements have formed. Street protests are organized and rallied social debate. Young females are advised not to go home alone, but be accompanied by

friends. The media forms a national discourse on immigration, having underpinnings of xenophobia. This creates the view that public spaces are unsafe. The subject is on everybody's lips. The students address it and the news round turns quickly into a value debate. The teacher first approves, but changes her position as she realizes that many comments have latent xenophobic remarks to make. They contain prejudices and stereotypical ideas of immigrants. The session divides the class. The quieter part sit on one side and the quartet on the other. The latter dominates and engages in a tense debate with the teacher. While she first had a moderating tone in English, she swaps to Norwegian. The session gets one-tracked and she feels compelled to intervene. The condition deteriorates, as one of the students is Afghan. There is an intense argument with frequent interruptions:

- I: It got completely side-tracked with all these comments, which I feel have to be argued against. They are completely horrible many of them... You get the 10 seconds to sell your idea. If you have not sold them within 10 seconds, then it is not interested.

After the news, she wants to establish what took place and her performance. She explains that previous value debates had positive outcomes. Students are curious and start reflecting. They process the information and explore concepts from various sides. Such learning activities have benefits, but also risks. Value-driven class debates can involve transferring responsibilities and the teacher can lose premise control. Polarized views can dominate, implying that the students seldom deep-dive into the context behind the news, but merely skim the headlines and give in to stereotypical ideas, categorizations, emotions, and institutionalized myths and beliefs. This overtakes at the expense of nuances and depth. But the session reconfirms a previous experience, that students are skilled at retrieving information and have effective search strategies, but they lack the ability to connect pieces of information to a larger picture. This surfaces as evident, when students lack basic geographical knowledge on issues most would take for granted, like placing the location of Kabul in Africa. The outcome contradicts her objective that students can adopt new knowledge through reflection, as they appear to have challenges in "decoding" and interpreting the news they traverse. They take the news stories for granted. Instead, polarization leads to her having to defend certain students and take sides, causing conflict. She interprets some students' comments as somewhat irresponsible, lacking boundaries, leading her to conclude that:

- I: The reflection is gone. I clearly did not get on with it that today.

The consequence is re-planning. She considers scrapping the news round, but concludes she likes it. This leads to realizing the challenges with working digitally. It demands having a clearer focus on performance in class. She considers if she has to take a more active role in choosing the digital content for the students. She even contemplates skipping digital items, and rather talks about using passages from the textbook as a source for reflection. But she questions if the learning activity is too complex. She thinks she demands too much of the students. It is the lack of reflection that makes her conclude this. Many students manage to *refer* to what they read, but cannot *reflect* on what they refer to. When many cannot reflect, they conceal themselves behind silence or making noise in class. She is at a crossroads. She even considers giving in and returning to use the textbook:

- I: I want the students to go online and be able to see into things, read, learn, and reflect on that. There's nobody coming and distributing texts to them later in life. To me, this is more realistic that way. It is perhaps a step too far.

The refuseniks of blogging

The flipside to the news round is blogging. The teacher starts harvesting experiences, which are dual. Blogging in the Spanish class resumes and the students continue to blog, but there are only one to two entries on record in October. Many students have written a short text in Spanish and published it. There is another reality in the English class. Here, some students have refused to blog since August. Until now, only four students have made blog entries, while the others have been encouraged to submit on paper or on the school's LMS. The teacher struggles with receiving enough submissions, which are essential for grading. The situation deteriorates. The teacher is on the verge of writing individual letters on non-completion to many of the male students. She temporarily suspends the blog project.

The male students' refusal to blog was explored in my interviews. The students expressed skepticism. The main theme prevailing over others is the transparency of blogging, making it incompatible with the students' view on learning. Blogging is too public:

It's exactly the same as posting your homework in the cafeteria. It's something you don't do... I feel that homework is something a teacher should see and evaluate, and that not everybody can just read and watch... It's not a big deal that others can see it, but it's the principle, it is only the teacher who really should see your homework... You don't go around asking, "What do you think about this?"

She said that all the tasks we were supposed to do, we could have done on Fronter (LMS). It is so much easier. There it is a place for all your homework, instead of uploading and such clever stuff. I don't have any blog. It's not happening. I made one, but I did not post anything on it.

Fronter is an educational tool, blog is not. Blogging is for those who like to publish their life for the entire world. One should not publish your homework on a blog. It does not belong there.

The students did not want to show their foreign language skills to an unknown audience. This unknown audience could abuse them in a form of online bullying. Publishing is associated with little sense of place. To be sovereign within their own turf, the students adopt a conformist strategy. They seek refuge where they can find trust, which oddly enough returns to symbols of the education system, like arguing that the teacher is the only one who should evaluate your schoolwork and a LMS is the acceptable place to submit, sites where anonymity and privacy can be preserved. Another aspect is the gendered public perception of blogging, which is reflected in the adolescent youth culture practice of "pink blogging". Indeterminate of its nature, it can be seen as an individualized adult consumer culture lifestyle, dedicated to experimentation with feminine practices. This is seen with skepticism and challenges the identity of young males:

I do not really see the point. It is only an egocentric side of yourself.... Why should people care, I'm wearing this today, post photos of your pants bought at Wagner and shoes I bought some other place. Why should people care about it? Why should I do that? I think that people really do not care about what people wear each day.

I think it is silly to tell about your private life. I'm at the café with the girls... No, blogging is embarrassing. A guy should not blog.

Framing recursive patterns; between Web 1.0 and Web 2.0?

Three months into the school year patterns are now recursive and some conditions develop into routines. October shows the challenge in stabilizing the structuring and organizing of the teacher's model after its introduction. This turns out differently in both classes and expresses itself in relation to some distinct sub-themes.

First, we observe how differently the two classes adopt and respond to the learning design. One can identify the emergence of two different learning environments. It works well in the Spanish class, while in the English class it is otherwise as the teacher encounters skepticism toward the use of technology. The blog project is tentatively suspended.

Second, we learn that in order to work and interact "online", considerable personal resources have to be socially invested in "off-line" ties. In a sense, the teacher has to "invest" or "capitalize" a large volume of social capital to work with her design. It has to be produced, instituted, and managed continuously and is a foundation that has to be "built" and laid down in the classroom setting. This is apparent in how the teacher works "behind the screen". She has to motivate and bond with each student and the classes as a whole, and enact a positive learning strategy and teaching practice, all essential elements to create the positive learning environment.

Third, how digital are the students and where are they on the scale between Web 1.0 and Web 2.0? The students differ. In the Spanish class, the students are motivated to learn a language, they work independently and show an ability to be self-organized. The students achieve concrete results from the learning process. Here, the teacher can give individual supervision to each student. All the students have access to each other's blogs and they comment on them behind the screen. They are not afraid to publish their assignments. There is learning taking place from social interaction, both in front of the screen and online. They work more with the technology frame the teacher sees as Web 2.0 or the social web. In the English class, there is another framing. Students are more orientated toward a Web 1.0 frame or print approach, implying a loyalty to the institutionalized practices of the textbook. The learning activities show that the male students are good at searching for and retrieving information, but lack the ability to link the information to a larger context. They are seen to be self-organized, but are not willing to show that ability and they prefer to work individually. These insights will lead to changes in how the teacher organizes and enacts her learning design the next month.

November 2011: The unexpected enabler of audio-visuality

In November, certain learning activities are scheduled. The students in the Spanish class are to learn more about prepositions, important verbs, the hours of the day, how to ask questions, make decisions and talk about the weather. The English class continues with the news round. The teacher decides to introduce the students to gaming software.

The role of gender performance and the learning atmosphere

Recent activities have a negative impact on the English class. The teacher has a good relationship with the students, but incidents of misbehavior make it challenging to initiate and continue stable learning activities. She is focused on how to regain premise control. She suspects a latent pattern, as she assumes some students show the same behavior in other classes:

- I: I went home and thought about the last lesson. It's all about controlling these elements. I contacted their main teacher. I got an idea of how they worked in other classes. They see exactly the same. There is a kind of pattern. It's easier to do assignments in vocational, because they do not see English as important. They think they know English. They have nothing against English, but they view it not as important to learn. It is a bit peripheral.

The status of the subject and lack of motivation to learn it resurface as themes. But there is now a gender code, which is interpreted to her disadvantage. Male colleagues are assumed to have a different position and communicate differently, a masculine code she lacks:

- I: It confirms my assumption. Meanwhile, the other teachers are male. They have an easier life than females, when dealing with some students. They address them in a more masculine way and control them in other ways than we do. I have talked to others about it. And then I change my method. For example, that of using the digital at the start the class. Working digitally requires self-discipline. If you are going to read a newspaper, it requires self-discipline.

Gender performance is on display in the classroom. In one session, some students perceived as those who misbehave are absent, which dramatically changes the classroom atmosphere:

- R: Four of the students are not present today.
 I: Two students change. The two others are just “followers”.
 R: In my head, it's a small group of students, who have so much to say. What do you think about that?
 I: As you can see, they spoil everything. I think that's my job to control them, but I also see that I can't do it. When I use the academic way, “Listen son, you cannot say it like that”, it doesn't work. What I have to do is just say, “Shut up”. I just have to use that kind of language. I did it partially last time. And it worked.
 R: But one or two students have serious consequences on your teachings.
 I: It's really too bad that it's like that. But that's what teachers have to work with today. I don't think people realize how difficult a single student can be. When I think about it, there are many reasons. There are many who have diagnoses, who are quite restless and unable to sit still. That has consequences on the learning for other students. It's clear that it's so in my class. It has impact on the learning of the others. It's not a good thing in the long run, that we get this kind of grouping. What I think is that there are no consequences for showing that kind of behavior. One can just continue like that, you get called to the Head Master and then you come back. The teachers get angry and then you come back again. Nothing happens. There are no consequences. The way they look at it, is that as long as they are within the limits, they manage to get a final grade. Because it's like that. We have no way of sanctioning, other than to tell them to behave like adults. If I do it twice a week, then it's microscopic what I manage accomplishing in the long run.

Reordering the news, beyond information retrieval and filling context gaps

The news round is reorganized and the teacher concentrates on teaching strategies. Instead of the students exploring the media landscape for news stories, she gives them a printed text that they are to read first and then answer questions by working in groups. She chooses *for* them and also dictates which students are to work together. This is necessary. The previous sessions

show that the students lack the essential self-organizing ability. She is not allowed to finish her “point A” to get to “point B”. Frequent interruptions create a feeling that she is not allowed to explain the context behind the news. The students occasionally carry out her instructions, making it challenging to create space for reflection and concept-exploring. She sees it as demanding to give individual responsibility. To counter it, she instructs them through a *print* approach. This gives premise control over the learning process, creating a paradoxical result; to work digitally in an educational context, a textbook approach is used:

- I: In that sense, you can say that reading a single text, to do an assignment on the Web, requires self-discipline. It requires that you know what to do, and you have a goal, and see how you can accomplish the task that is there. And you evaluate it after you’ve done it. But this is a process that must be learned. That is what I’m doing here, putting more focus on it. I’m going back to the web, but now I run this through a print press approach. And they’re going to have to work. Eventually, I will return to the web. Then it’s going to be very clear requirements. Then it is not just reading a headline, when we go through the news. They must be able to apply these concepts later. It becomes part of the assessment criteria. In that sense it’s education to be online. This is a kind of Web 1.0, which I am doing, being able to read things. I want to get up on the social web, or Web 2.0, but with this crowd. I have to trust them, so that they do not do harm to others.

The teacher sees limitations in her model. There are different technological frames. She wants to work where learning is characterized by educator teacher and learner co-producing knowledge. But she is cased in another, a Web 1.0 frame, where the news session can be an extended textbook into the digital. To bring her students up to the Web 2.0 frame requires other abilities, like language skill-set and contextual knowledge, etc. But she is obstructed by the professional subject she teaches, foreign language:

- I: Yes. The challenge is getting social web to work in foreign language training. If you have an imaginary and real user, you must distinguish between the two. What we are trying in foreign language training is to find a real user, that you contact someone. Even if you do it digitally, then you have a real receiver, which you define. It can be a footballer, but you have a receiver that student really sees. This may help to make it more personal, what they write and what they do not write, things that are not socially acceptable. I have taken the students on the forum for painters, for example. There they read the discussions by other painters, who have specific issues, how do they fix this corner, when it is so and so. There I asked my students to write something. I did this a few years ago. The students went on the forum and got response. But such requires self-discipline.

To be motivated to enter a participative culture the students need to know how to engage with it. Moreover, they need to know the potential knowledge it offers. They need to know the strategies to deal with it, which involves constructing an awareness of whom an online peer is and the community that one wishes to engage with. This condition has to be created in the classroom, so that the students will perceive it as meaningful to enter the digital landscape. This means an emphasis on collaborative learning:

- I: You have seen how some the groups worked. Some groups work well with a text and that part works. I'm on my way to get collaboration to work. But you see that it's the group that's the challenge. It's not that they don't want to, but together they become a bit hopeless. Some of the students can't sit together. I think I'll re-seat them next time. I had to give up the blog project. I have wanted to work more digitally. The news and the internet. I'm going to continue with it. I could always have wished that they could have posted the videos, if it had been really good, so could this have been posted on YouTube. I don't not know if their teachers think this is ok. I do not know if I should do it.

This involves a focus on teaching strategies. Her experience from the news round tells that the students seldom work beyond information retrieval. They accept the news reports as they are. They lack a willingness to decode the contexts behind the news and approach the dots of connections, which can lead to understanding a larger picture. There is a "context gap" required to be filled. She takes a proactive role and attempts to break down the learning process into units. One of these is to explain to them what questions a reader should ask when interpreting a web text, a strategy that can help validating the reality presented on the web:

- I: I think that they understood the deal with the inverted pyramid and the questions. The next time, I bring up an article, I ask "who", "what" and "when". And then I use the terms that I introduced today, just flip the image. And next time, I will allow them to go out on the web again. Then they have to write it down. I have to structure it this way, so that they don't only read the headline but reflect more.

A pre-skill required to engage with a participative web culture is contextual pre-knowledge. The students lack the ability to connect pieces of information to established knowledge. The students are socialized into the reality portrayed by the textbook, which they appear unwilling to challenge or interpret. The students can retrieve, but difficulty arises when they are to interpret and rebuild one with their own opinions:

- I: 50 per cent of reading a text is background knowledge. If you don't know it, you can't read between the lines. They are talking about young people today, they are on the Internet. But the people who address that matter, have gone through the traditional knowledge required to interact on the Web. They have the background knowledge to be able to go in and assess which pages are ok and what is nonsense. If you haven't gone through it, if you think that the Second World War was from 70 to 73, then you have no background knowledge to assess whether this text is good or bad. When you learn from the Internet, you have to go through many pages, as you say, it is good, that one I'm going to focus on. You must have the knowledge to choose. That's where I think we overestimate some of today's youth. I disagree with part of those optimists saying that this is where the students are so clever. They are very naive. You can sell them anything and they will believe you.

The experience in the Spanish class turns out differently. There, the language may be a barrier, but she has managed to create an acceptance of participation:

- I: There I have the language as a limitation. Most students today, in the other class, I teach the first hour, we use some music and YouTube videos. We talk a bit, teach a little, while in the second hour, I sit with each student and work with them. They use digital sites that are designed for language learning. They choose

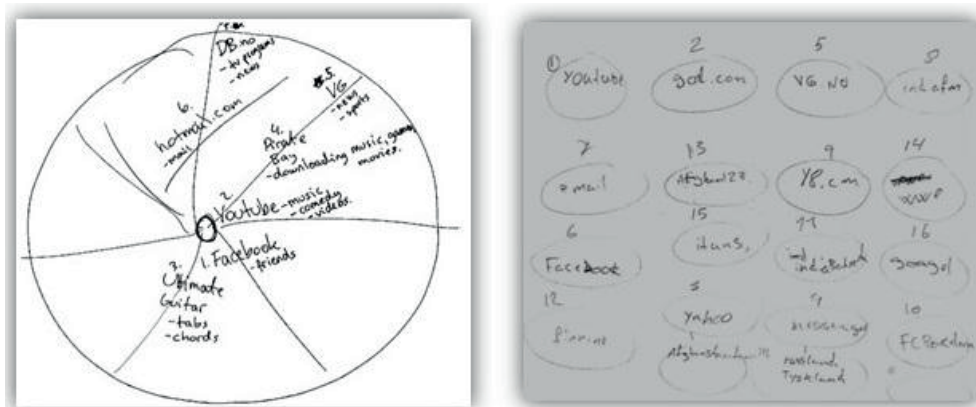
a task and perform as many as they can. That's a bit behaviorist, but they get feedback. It's those kind of tasks. But yet they are self-organized, about 90 percent, but there are some who are there and just game. If they are there, it's there for a short period and then they come back again. It's not total flow. They know why they do the tasks, because they must learn one thing. And they know that an assignment is skill training, that volume counts. But they are very aware of what they are learning. It's not the Internet, but Web 2.0 in a way because it's interactive. They also go to each other's blogs and see what the others have written, they give each other feedback. They do it in front of the screen, they don't write on the blogs. They say nothing about the grammar mistakes in blogs. On a blog, one only talks about the content. Not that you have three typos. It's wrong, but you also have the access. You have access to what each other have written.

R: The trust you give them to work, it works?

I: It works. I explained it today. I stand behind and push them forward in their learning. It's you who must know where you are going. My job is to help you. I'm not one who's doing the job of forcing it down your throat. I've managed to create an atmosphere there. I got it from the start, new subjects, new school, great opportunities. It's a very cozy class. But I have the same type of guys there too. A few. They are creative, but smart. They work while being creative. There is progress nonetheless. It costs nothing to ask for help.

Entering the audio-visual sphere of YouTubing

Figure 5.7 The mental nodes of two male vocational students in the English class.



The teacher challenges the assumption that today's youth are "digital natives", based on her past experiences. Her frame is shaped by a Web 2.0 educational approach, where learning is assumed to be formed by using ties and web resources. Moreover, she strives to create the conditions for enabling a participative and collaborative learning culture, where sharing and creation of user-generated content play an important role. Her students approach social media from a Web 1.0 frame, where they are into a "read-only" rather than a "read-write-and-participative" frame. They approach social media from an educational textbook approach. She wants to motivate them to work beyond retrieving and passive consumption of media texts, to become online publishers. There is a gap to be filled. This pattern is reflected in my interviews with the students. Only four of the 26 students reported having produced and published user-generated content, which was often related to their hobbies. A vocational student had published

YouTube videos. Three female students in academic studies blogged regularly. Very few responded to their entries. Few students were active online contributors, but predominantly used social media for passive socializing.

In the English class, the teacher wanted to illustrate this. She asked the students to draw mental nodes of how they interacted online. Two are displayed in Figure 5.7 and show that their user patterns differ in complexity. Many interact between Web 1.0 and Web 2.0 sites. Some students visit many sites, as many as 15, while others are content with four or five. The students divided their use between visiting sites under editorial control and SNSs, which they used every day. As I showed in the previous chapter, the students used YouTube for informal learning. Here, the students made connections between pieces of information to create an understanding of a concept, a self-organized learning practice that happens without any instruction from an educational authority. But the students only perform it on activities that interest them. In a formal learning setting, the reality can be different.

Figure 5.8 A retrieved YouTube video creating discussion among students on bullying.

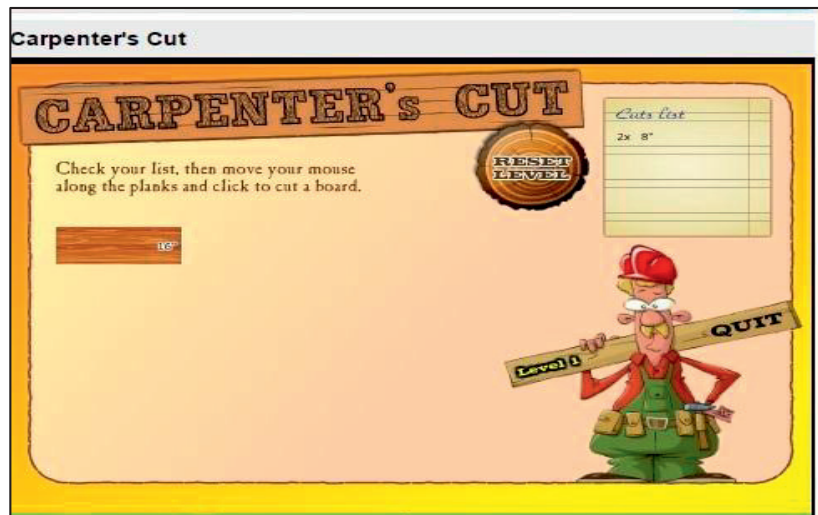


Until now, the teacher had mainly used YouTube in the Spanish class. YouTube videos are only viewed for two to five minutes, to expose the students to the language and as an introduction to a theme they are working on. This involves YouTube videos being enacted and embedded into larger learning activities. The teacher has positive experiences with this. The situation is different in the English class, however. Learning activities have been enacted and organized around a principle of working with interpreting web texts beyond information retrieval. The challenge has been to create conditions for reflection. Strangely enough, during several classes, some students spontaneously decide to retrieve YouTube videos and talk about them in front of the screen or in groups. Some other patterns are contradictory, in terms of being motivated to learn and practice English. Some students, who are skeptical about learning the language, retrieve YouTube videos and watch English-language TV programs during class breaks.

At other times, when the vocational students were talking to the teacher about a topic they had impulsively decided to retrieve YouTube videos to illustrate a point in a discussion. Once, they were talking about bullying. A student searched for the 40-second viral video of an Australian student slamming his tormentor in the ground fighting back against bullying, the Casey Heynes case from 2011, shown in Figure 5.8. Such cases proved that YouTube videos can spur engagement:

- I: It works everywhere, but it works as part of a context. When you teach something, you want your students to understand concepts, to visualize knowledge. When you use sound and image, you activate both parts of your brain, a larger field. And that leads to more learning. There are arguments for that it works. People think that YouTube only contains music and entertainment, but there is a lot of good material there.

Figure 5.9 An educational game introduced to the students, *The Carpenters Cut*.



The other side to YouTube is gaming. The teacher organizes a lesson in the English class where she uses gaming to perform a goal-orientated learning activity that relates to the working day of a carpenter. Some students are absent. It is unclear why, but it means that only between seven and ten students are present. The remaining students are to learn about the imperial measurement system. To fulfill this learning goal, she uses an educational game, *The Carpenters Cut*. The aim is to cut timber into given sizes, which means to practice mathematical skills with practical know-how. The lesson only lasted for an hour, but many students were “immersed” into it:

- I: You saw it today, when I gave them that little touch of an educational game. This was about cutting timber without having to do much of it. The idea is that it should be cut in the best way. You saw how they were “inside the machine”. They continued to play with it after we should’ve moved on. And it was a very simple game. You can only imagine how it is, when they play *World of Warcraft*, where they have all the graphics and other possibilities, for example.

The teacher has had different experiences with gaming; there are benefits and barriers. There is a reality that shapes the life of the student. She has met students whom she would judge to have a “gaming addiction”. Once she had a student who gamed continuously, in class and during midday breaks. Later she never saw him again, which led her to conclude that he did not pass his subject. She believes that many students get so immersed in gaming that it has consequences for their education. She compares gaming to being engulfed into a soap opera. There is a continuous story that seldom ends. They can sit up all night and get little sleep. When they are at school, they are so tired that they fail to learn. Gaming in an educational setting pertains a different setting. The conditions change as learning is about work, to drill one’s skill-set, and

attain educational values, but also the content of the games has to be linked to reflection and the theme in which the subject is taught in. From the teacher's perspective, introducing and organizing classes around games requires management by the teacher when enacted in class:

- I: It's the intrinsic motivation that governs gaming. If they had gamed just to learn English, it would have not been a problem. They would have done it immediately. Most of them. What do they learn then? It's this educational thing.

She acknowledges that the English skill of today's youth is high:

- I: I see that students learn a lot of English just by gaming. There's no a doubt about that. There are those who develop the language, which is amazing, a very advanced English level. You see it by the way they construct sentences, the complexity in the sentences, vocabulary, which they have acquired from gaming. That means they read instructions, manuals, like in *World of Warcraft*. If you start reading them, they are rather heavy. They learn much English that way. They chat too. There we find students who really learn. But they spend some hours there too. That has an effect on language learning, that's very clear... And the language surrounds them constantly. The English they learn in school is only a small part of what they learn totally. They learn by watching *CSI*, that whole package there. That is what contributes to their English skill. That's why they're so good.

She has previous experience with students who take it a step further, those who live and enact with the stories embedded in games. They are mastering the capacity to link and see connections between language, genres of literature, language and mediums:

- I: I have examples of students who really shine. There are two groups. Those who are into gaming, they read the back story. And you have those who are into the *Lord of The Rings*, which is focused on science fiction. They read very digital. They engage into those reading circles. They're excellent in English, but they are fused into it.

Framing recursive patterns

Four months into the school year patterns are now recursive. We observe certain reversed and surprising conditions, developing into routines. November is characterized by breaches, in the structuring and organizing of her model.

First, we learn that her model is enacted and instituted differently in the two classes. Things are going well in the Spanish class. Here, the students work and there is a stable learning environment. In the English class, the learning environment appears to fluctuate, and gender performance arises as a theme. The teacher also experience differences in how the students work. In the Spanish class, she can work and spend time with each student, as they are self-organized and complete their assignments. This is more challenging to accomplish in the English class, however, where she struggles with getting the students to submit work.

Second, the greatest breach is how the teacher is forced to return to working under a textbook regime in the English class. In some lessons, she abandons working digitally and just uses the textbook. There are limitations in her model, which are due not only to student misbehavior, but also that foreign language and critical reflection requires previous contextual knowledge.

Third, the use of audio-visual social media proves to be the start of a successful user practice, especially the use of YouTube videos. Audio-visual content can have a triggering effect, which is seen as positive for the learning process, something that applies for both classes.

December 2011: The halfway assessment

In December, the teacher focuses on preparing her students for their mid-term exam. The scheduled learning activities from November are prolonged, but the teacher wants to reflect on her accomplishments.

The work of creating a positive learning environment

At the beginning of the school year, the teacher saw it as important to create a positive learning environment. This was a foundation to work digitally. But she quickly established her classes were poles apart. The Spanish class was framed as “silent” and the English class as “challenging”, implying that both were governed by a youth conformist culture. She concluded that this could potentially have a negative influence. Addressing this involved social investment in ties and having good relationships with her students. The work has paid off:

- I: When I say that I work with the classroom environment, that’s where I started. What I want to achieve, I’ve achieved in the other class. There I’ve created a relaxed relationship with the students, where trial and error is okay. That’s the goal of the , to lower the threshold so that you can make a bit of a fool of yourself. If we know each other, you will not be mean with me. It’s as simple as that. It’s the first thing that you need to get right in a new class. I’ve succeeded in the Spanish class, where I have students from five different classes who meet. They were in the start terrified at exposing themselves, to be able to do anything, but now they don’t think that someone else will be mean to them. But they’re still afraid. I’ve managed to break that down. I’ve got them to collaborate digitally and face-to-face, in such a good setting. That’s when learning happens, I think, when they get there. But in the other class, I’ve worked very hard to achieve it, to create a positive setting. I think I’ve gained acceptance that it is ok to be in class and to ask, stuff like that.

There are other aspects and personal costs in creating a positive learning environment. The teacher has worked to establish the acceptance of a class sharing culture, where opinions and experiences can be exchanged freely between educator and learners. This has sometimes “worked”, while in other cases it has been hampered by conditions beyond her control, requiring intervention. Above all, she has perceived there is bullying between students and student misbehavior, factors that create a code of student conduct setting a degree of premise control. This caused a feeling of non-continuity, a sense of conformity, producing many situations where students do not want to stand out, having an effect on their engagement. When that happens, it becomes difficult to share. This has influenced the teacher’s performance of her role and been a condition requiring management of relations and navigating between social codes:

- I: I have a code, the school has a context. They have to deal with it. My job as a teacher is not to go into that bullying code, which they have. I want to break it. My job is to get them to go between different codes. I’m trying to exclude that code and include them in the other.

Certain students have pushed her personal boundaries, a feature that has been observable in the English class. This has involved showing a different side of herself, which in reality is to create a social character of herself that she seldom feels comfortable with. She had to become “a strict teacher”:

- I: What I have to do then is to take that and challenge their values. I’ve tried to do this through dialogue. But it did not pay off so well. And then I turned. I used the familiar tactic and was strict, send letters home, the formal way. They then realized it. It worked and they understood there is a boundary. They still want to be in the system, the school system, they want to go through it.

She senses that the positive learning environment has allowed students to bond in the English class. There is the creation of small networks happening in front of her. She has seen many small situations, where students who have not usually helped each other, have started to do so:

- I: An episode may illustrate it. A student said that he did not understand some words in a text they were reading. Another student knew them and grinned because the other didn’t understand them. But the student repeated that he didn’t understand the words. Then, I saw that the relationship between them changed. The student took on the role to help the other. And the next time, they were reading a text, he asked, “Are there any words that you do not understand?” That, I think was pretty good. I’ve seen this in several contexts, that he has established a position in relation to the other, “I’ll help you, when you need help understanding words”. In that way, they have created a network. So you have small examples, there and then.

The reflection on the news round

The news round is an important learning activity and had several intentions. She wanted to enable her students to evaluate and discuss issues happening in society at large; to teach them personalized strategies to examine the context behind the news; to make them see connections between the dots of information they traverse in the language; to motivate them to reflect on digital content beyond retrieving it, and to practice the language orally, skills that they can use to write texts. The teacher concludes that the situation is different than from the onset:

- I: If I think professionally, I have consistently tried to use the main language as much as possible, even though there was almost no one who wanted to speak English initially. If I’m to summarize my impression, we used some Norwegian occasionally, but in conversations with students today, for example, they were more willing to speak English. That has turned. There is no threshold for talking, really. I think they’re not scared any more. I’ve got an atmosphere where it’s okay to speak English. If they don’t get it, they speak Norwegian. I have accomplished that. If I insist, they swap to English, without any problems.

There are nuances suggesting that the news round has had an impact. This surfaces in individual conversations with the students. Some students are willingly to go behind the news and relate isolated stories to a larger picture. They are making connections and starting to fill in the blanks to reduce contextual knowledge gaps:

- I: I hope I have managed to motivate them there. My intention was to motivate them to take greater interest in what is happening online and go a little bit in depth, go behind the headlines and between the lines, not just the headlines, but go a little further. There was an example today on this mob boss, where they reflected a little more than they had been able to at the beginning. And it was a little more structured. I think that I have given them that, in terms of strategies. I have given them a strategy for reading.

She is uncertain to what extent they understand the meaning of the reading strategies she gave them at the beginning of the semester, like the inverted pyramid. She senses that they are slowly learning to get answers to the critical questions, which are vital to ask when surfing the media landscape. The vocational students can put their finger on “what” the news is about and “when” it happened, but they struggle with pointing out “why” certain news stories get more attention than others do. The latter point is difficult to answer, even for experts, implying that she cannot require the students to show expert skills on social issues. There are several cases where she and the students deconstruct media texts and jointly explore them in a step-by-step manner, something that leads to discovery:

- I: We started to explore and go backward. We linked a media text to their work situation and the labor market. And then, “Oh yes! It is linked together.” That was one example. They start seeing a larger picture.

This means that the news round is a reminder of practicing recurring processual learning activities. You cannot perform it once and believe it leads to learning. In contrast, it must be performed repeatedly. This demands seeding an understanding that the student needs to know that, behind every digital item, there is a sender with an intention. Any information source should be evaluated as valid, reliable, or relevant, an understanding that the teacher must create and make visible:

- I: When a teacher chooses media texts in the classroom, there is a process taking place there. I have to highlight that process, show it, so that students are able to apply that process. There is a search process in the same way as reading process is a process. Browsing the web to find an article you want to work with, that is part of knowledge, a skill that must be practiced. It must be taught. Before you have some clue in which the context is a part of, if one reads about Afghanistan, for example, then you have to know a little about it.

This means to teach the students to be aware of the quality of the information they interact with:

- I: How do you find quality on the Internet? That is something that students have to learn. We need to structure that mindset. What do you think? Therefore, you need to check that out. Many teachers do not get assistance on how to teach that process there. You do it yourself, but from doing it yourself, implicitly, you are able to present that clearly, to what you think, what you do, how to build up that competence, that is rather difficult.

She concludes that several students have managed to take a step further. Many students show the ability to take a media text, reflect upon it and give it depth. This is related to how the students perform and have developed their search strategies, but also how they present their stories and from what sources they are retrieved. And most crucial, there is *reflection*:

- I: Today, I asked them to read an article. If I compare it with how they worked in August, I think there's a completely different quality. It is more reflection. They manage to choose an article. That is the first factor. They are not only just browsing and never stop. Everyone has a story and now it is based on interest. Some months ago, it was not like that. They are able to visit sites and find information in English. They know where to go and they came back with different types of media texts. They have reached a level where they are able to take out information from a text.

The dual experience on making prosumers

Blogging turned out differently in both classes. In the Spanish class, the students have continuously published their assignments, although Table 5.8 shows differences in numbers of entries. Some students have been productive and made entries from August to December.

Table 5.8 Excerpt of blog entries in the Spanish class, August to December 2011.

Student	Month and number of blog entries					Sum
	Aug.11	Sep.11	Oct. 11	Nov. 11	Dec. 11	
S1	1	9	1	2	-	13
S2	3	7	-	-	-	10
S3	2	7	1	4	-	14
S4	2	4	1	1	-	8
S5	-	4	-	2	-	6
S6	2	5	1	1	-	9
S7	2	3	1	3	-	9
S8	2	2	2	1	-	7
S9			Published on wiki			-
S10	-	1	-	-	-	1
S11	-	3	-	-	-	3
S12	-	2	-	1	-	3
S13	-	3	1	1	-	5
S14	-	1	-	3	-	4
S15	2	7	-	-	1	10
S16	1	3	1	1	-	6
S17	2	1	1	3	-	7

The flipside to the success in the Spanish class has been the setback in the English class:

- I: I abandoned the blog project'. It didn't work.
 R: Why? Why didn't it work?
 I: Because the students have an inner self-policing, I would say, going on this with bullying. They don't expose themselves online, because they become vulnerable. A student said it clearly. He said that "if I post anything on my blog and someone else sees what I've written, and see that I don't write proper English, others will link to it". If they get hold of your blog, and link it to Facebook, they're bullied. That was their conclusion. It's about the fear of exposing themselves, the fear of being exposed.
 R: How does it express itself, how do you see that?
 I: Comments in blog entries. One who's naïve posts something: he or she has done something, thinking about something, a video, a statement, and that sort of stuff, will create feedback. And when that starts, the misery comes with it.

The teacher has used blogs and wikis since 2007. Previous students have never rejected the use of them, but they have been skeptical. Nor have previous classes in vocational learning rejected blogging. This is the first time and it was a surprise:

- I: I've had several classes in vocational studies. We have made blogs for the last four years. I think that was the first time. I've never had that kind of reaction.
- R: Is this unique to this class? Or is this part of a larger context?
- I: I think it is unique for this class. The thing that this class does not have in common with other classes is inner self-policing. It's a harsher climate, which easily can turn into bullying. I believe that is what they are most afraid of. I don't think they are afraid to put things on the web, but there is certainly some that can exploit it.

The teacher meets an impasse. Social media possesses an underrated power, which rebounds back on her classes. The male students belong to a trend, adolescents who have tested social media with positive or negative outcomes. They have learned, implying that they most likely will not engage into the same matter twice. Motivating them to blog becomes difficult:

- I: Many are naïve and don't realize the power of social media. It can turn back again on those who say something. I think they have learned. And after one or two times, it ends with that. This group has tried it.
- R: Is this something you have experienced in recent years?
- I: Yes. The student group is changing. That you're seeing in the vocational class, I think, this reservation to blog, has something to do with their past experiences. When they expose themselves online, they see it can turn back on you. You can't take it back. Therefore, they fight back, because they don't want to expose themselves. This is the first year I've seen this. I've never had students who didn't want to blog.
- R: Is this the first time in a vocational study program?
- I: Yes, it's the first time. I think it's a trend. The first time, you don't understand what and where you're going. Now you know what a blog is. They know what it might lead to. You can be famous or be hung out. They are more experienced than those who have used it in previous years. When it has something to do with the blog, so it has something to do with self-confidence and your willingness to expose yourself. If you think that what you've posted is ok, it's nothing to be afraid of. If you don't have that understanding, things can be used against you. And that's what I think is happening in the vocational class.

Blogging in the Spanish class paints another reality. There blogging is successfully adopted, implying no resistance among the students. The students are self-organized and carry out tasks:

- R: In the Spanish class, have you met resistance there?
- I: No. Not verbally, not at all. They see that it doesn't cost anything to post things. They publish notes from grammar exercises and vocabulary, it comes out the right way. But when they publish a full text, it goes a little slower.
- R: Do you have a quality assurance before it is published?
- I: No. It's no learning behind. They publish first ... and I sit down with the student and look at the text, and then they go back and correct it. It can happen in any order, or in a different order. I'm looking at it first, it depends on when.
- R: They don't come to you first and then they publish it?
- R: Not at all. It's an important point, I think. This allows you to learn, and it is a process. And the option you have with blogging is that you can go back and change things, once you have learned more.

Blogging works. The students even publish unfinished material, in a foreign language they are just starting to learn. There is low cost and little risk in publishing. In interviews, the students admitted being skeptical, but soon realized that few would ever read their blogs, besides themselves and their teacher. They rarely commented on each other's blogs. If they did, these were mostly supportive comments. They evaluated each other's work, but this happened off-screen in groups in the classroom. The students varied in how productive they were and how often they updated their blogs:

- I: In the Spanish class, it works well. But some are not so good at putting out everything they've written. They have a number of texts they have been working on, in a Word document, for example, which they later put out. I don't know why. It has never been the case before, as I've managed to motivate them to add more text.

In the English class, the blog refusal had an impact on the planning of classes and text production. The teacher needed submissions for mid-term grading. The original plan was to use the blog entries as documentation for assessment. Instead, she returned to paper-based submission, but struggled with getting the male students to submit work. She had to take drastic measures, during the course of the fall semester. Letters of concern were sent to their parents, explaining that the students were in a position of not getting a pass grade. This resulted in submission of work, but text production was still low. She needed them to give feedback and have a foundation for final grading. These conditions involved changes in the assessment of student work. Commenting on grammatical errors was overlooked. The focus had been on teaching how to write a structured text, containing introductions, main part, and conclusion. She is positive, as some of the male students have showed a will to change their writing habits:

- I: Regarding the written production, after I sent the letters, I've received many assignments. The students carried out that part. They have work and are going to write it at home. And that they have not completed, they have submitted later. There has been a certain text production, but it's not much. There has to be a minimum, so I can give them feedback and look at text structure. That's what I've worked on. I have not looked at words, spelling errors. I have overlooked sentence structure. I've only looked at text structure, how a text is built, with paragraphs, introduction and conclusion. Now, I just have to see how it will go at the mid-term, if they have understood it. But the last time, they were able to write their own news story, a paragraph came, and that structure you find in news article, the inverted pyramid, it came by itself, in a way. So, I've managed to get them on a path, teaching them how to structure a text.

January 2012: The turning point and standardization

A new school building has recently been constructed at the high school, which is located next to the old one. The two school buildings are different in design. The old school building was "closed", consisting of long corridors and closed classrooms. You could never see what was going on in the classrooms. The new school building is the stark opposite, constructed to be transparent. The architects have literally cut an "open street" through the structure, allowing many open spaces. There is much sense of "air". Instead of walls and long corridors separating the classrooms, windows are everywhere, making it possible to see all ongoing classes. Even small seminar rooms have windows, meaning that it is impossible not to catch eye contact with someone when strolling around the premises. All the new classrooms have smart boards, speakers, and digital projectors. Wi-fi is also included. In January 2012, all move into it.

The first month in a new year means new learning activities and fresh material to be covered. The English class starts working with a new theme, indigenous people in Australia and New Zealand. The Spanish class continues with learning more about Spanish culture and geography. The students are to write a short text in Spanish, about themselves and hold small dialogues in their groups and in front of the class. The teacher returns the students' mid-term exams, leading to discussion on their first grade.

The positive learning environment and the two tacit classes

There is a fresh start with a set of new rules. All the teachers and the school's management have agreed to enforce new policies on student conduct, which have been co-authored with the student council. It is not permitted to drink or to wear scarves, jackets and hats in class. Smoking has to be done outside the schoolyard, no snuff is permitted either:

- R: What do you think about the first lesson?
- I: The first thing I noted was the students' behavior. The Spanish class was quiet. I had to loosen [them] up a bit. They were more eager to join at the end of the class, in terms of listening. My first meeting with the vocational class, was that I saw them walking around in the hallways. And their teacher told them that they couldn't stay there, but that they had to go down in the main hall. It was strange. They were very curious on how the new school looks. I didn't see it as very negative. They went around, looking at what was happening.
- R: What do the teachers think about moving into a new building?
- I: They were very skeptical that it should be so open. That's what people are talking about. It has to do with traditions. Classrooms have always been closed, apart from the open schools. It is mostly in the secondary schools, and perhaps at the primary level, it has been open. None of the teachers who work here, have much experience with that. It's perceived as too open, as windows allow you to see straight into their classes. That makes them a bit insecure.
- R: What do you think about that?
- I: I find it exciting. The rooms and the environment reflect the work we do. People will be affected. When it looks okay around you, people will react to it.

The teacher is optimistic. New policies and buildings can set better standards. In the old building, colleagues experienced that students were disorganized. Snuff mucus and leftovers tended to be spread out everywhere and students wore jackets and hats. The teachers addressed the matter repeatedly, which proved to have little effect. A new school setting can change this. But some students attempt to oppose the new student rules already the first day, when they enter the classroom. After some discussion, they comply. The new student rules are contradicted by other teachers. They let their student leave classes before it finishes, causing visible student traffic in the open hallways. This creates noise and she stops her classes.

There are pros and cons of having a transparent school building. A teacher's practice is now open to inspection from outsiders, which can create unease. Many teachers are accustomed to a hermetically closed setting, which has offered little clues to *what* and *how* they teach. Teachers like discussing practice, but are seldom *in* each other classes to see what their actually colleagues do. That too changes, involving a breach in established traditions.

The new school setting appears to influence the teacher's classes. Her students are silent. Students can sometimes be *too* disengaged. This means that the "unwritten" classroom culture among her students in her two classes comes closer to the surface:

- I: In a way, you feel a bit more free when you have a vocational class. You get the truth very overtly, while in general studies it is much more a social play. It is about treating the student's mask. They are unsecure, but show it in a different way. In vocational, it's not to show that you do well at school, but that you should do as little as possible. If you're a bully, you don't need to show that they are poor in English. I would probably say that my class is quite open, compared to other classes in academic studies.

She knows her students better, but experiences a boundary, but it is difficult to know where it lies in the landscape. She senses a "resistance" among her students. She believes that many students have the potential to do well in school, but are reluctant to show it. The student youth conformist class culture governs and she assumes that it is taboo to have ambitions. You might be viewed as a "school nerd" and be stigmatized. This means that the students do not do any more than they have to, which is somehow reflected digitally. Male students are reluctant to engage, an aspect that was not the case a couple of years ago:

- I: A class I had a couple of years ago was less restrictive. They published everything. It was a super nice group. It may well be that from 2008 to 2011 youth has had some experiences, which are negative in relation to posting. You get negative feedback. You become more restrained. It may well be that it is a consequence of that. You should not disregard it. They see the consequences of posting, the negative and the positive. They might be a little smarter that way.

The teacher now has individual conversations with each student. She practices affirmative teaching, as she has more material to discuss. She gives them feedback on their mid-term results and discusses grading:

- I: I have nice conversations. They probably thought that I was going to point my finger or something. But it was not like that. I talked with a student. I looked at his mid-term and the work he has done. He lacked some assignments. I told him what was good. He can verbally express himself. And I asked which grade he thought he deserved. He said he was satisfied, if he got a 4. I said that you have to work a bit more to get it. I said I would give him a 3. Do you think it's fair? Yes, he said. And then I explained him that what he had to do to get there. There has to be some work, submissions, in order to improve.

The individual conversations allow her to perform an authentic assessment and evaluate learning progression, both of individual students and of the classes at large. The conversations can turn into an arena of social negotiation, where she and the student know each other's "bargaining chips" and performance. They enter the conversations with different interests and motives where the aim is to settle an irreconcilable decision. She wishes to motivate her students to learn more about a language, while the student can be more interested in knowing what they need to do in order to get the grade they want. This turns into a dilemma, reflecting whether focus in the learning process is about learning a new language or how to perform to get a top grade and get an early start for a good career. Even top students in her Spanish class can use this negotiative strategy, as they sometimes ask directly how much they need to perform to get top marks. Often they seem not to be motivated to perform beyond that particular boundary.

The conversations permit the teacher to assess the learning progress of students who she senses have advanced. Certain male students in the English class are satisfied with their performance and have experienced improvement in their language skills. This shows when she looks at how they write texts. The structure in their submitted work is better than just a couple of months ago. But she struggles with getting them to write proper and qualitatively good texts. The content is not at the level she expects and too often the texts are short:

- I: Once, in a vocational mid-term exam, the assignment was “a bad day at work”. And then it said you had to link it to the workshop, or “your vocational training”. So, you have to ask, what will they be looking for here? I’m not sure if they know. A student in vocational training wrote about a terrible hangover trip he had on a Saturday night. It was a “bad day at work”. His paper started with seeing a vomit bucket next to him. Then he came down to the kitchen and saw that his ex-girlfriend was with a mate of his. Do you understand? This is what I get at their English exams. What level of reflection is it when you link that to an English exam? You ask the question. A student in general studies would never have written in that way. You get those kinds of papers, as they seldom reflect and ask themselves what the intention behind an assignment is.

The individual conversations with the students confirm the development of two different class cultures. Although the teacher can influence this development through conversations and sanctions, she is aware that this can operate beyond her control. When entering a new class, for example, she can quickly acquire a feeling of what standard her colleagues have set there. Students can show no misbehavior, while at other times there is no “order” at all. In her classes, this makes a difference to how well she is allowed to give feedback to students:

- I: Self-assessment is very important. If you can manage that, it presupposes that you understand how to measure the goals in your work, you must realize what you understand and what you don’t understand. Self-assessment lies high on a taxonomic scale. You have to start at a place and it is a skill that you develop. Giving feedback there, is a step on that way there. Many people are not familiar with it, so one must begin somewhere. Giving feedback to my students is where I want to go. It is hard. If you have a text and don’t understand much, how are you going to know anything about self-assessment? What have I understood? What have I not understood? You don’t have the preconditions to get it to work and cannot assess others. If you don’t understand the verb system, you don’t know whether it’s right or wrong. It’s a process or skill that I want to develop. You must begin very slowly.

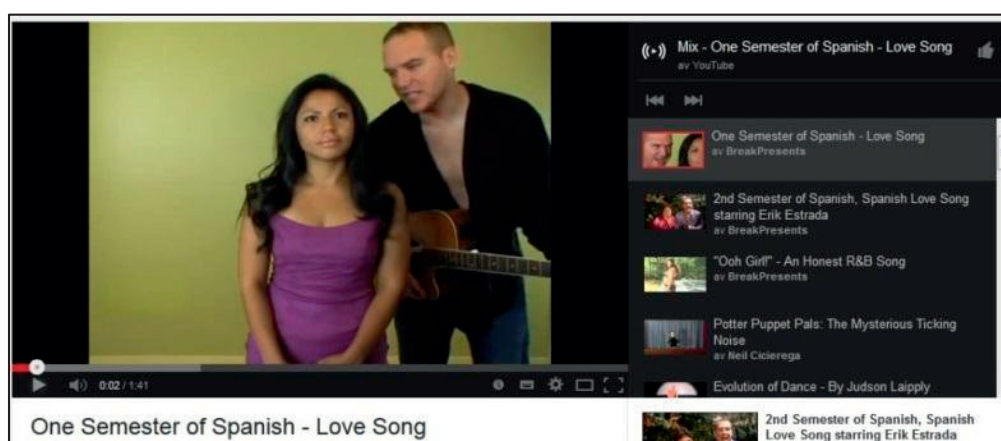
YouTubing in the classroom and connecting the dots

The teacher has on the learning agenda the post-colonial condition of indigenous people in Australia and New Zealand. The English class are going to see a movie, the award-winning and powerful New Zealand picture, *Once Were Warriors*, which tells the story of an urban Māori family and their problems with poverty, alcoholism, and domestic violence. The English students are going to explore sides of Australian and New Zealandian culture and geography. The Spanish students are to learn about Spanish culture and geography. The teacher uses YouTube videos as an introduction or an illustration to explore a given topic. The videos are used to spur engagement in class. In the Spanish class, she has used YouTube videos extensively. Many YouTube videos are embedded into the class wiki. These show how to sing the Spanish alphabet, how to conjugate verbs, how to order food in a restaurant, how to

introduce oneself, how to have dialogues in Spanish, how to present your family, etc., all of which have a practical value. In class, she uses singing as a method to learn Spanish, involving chanting along with YouTube videos as they are projected on a screen. Other times, they are screened as an invitation to address concrete social issues from Latin America.

In the English class, the class wiki does not contain many YouTube videos. But in her introduction to Australia and New Zealand, the teacher is interested in exploring the concepts of “crossing boundaries” and “extreme sport”. During a class session, she invited the students to go on the web to find more information. The students chose YouTube and retrieved a variety of short videos on various extreme sports. These were discussed in groups and in class. This developed into a session where her role as moderator diminished and the students gradually “took over the class”. The students engaged in reflective questioning about their own attitude to crossing personal boundaries, like risk taking in terms of adrenaline kicks, lethal danger, courage, bravery etc. in different contexts, with these discussions happening in English. This illustrated how a teacher cannot always plan and be expected to be in control, but that students can “take charge” of a formal learning activity.

Figure 5.10 Screenshot from video used in Spanish class.



YouTube videos allow the teacher to interpret differences in how reflective the students are in understanding user-generated content and relating it to their own personal experiences. Once she showed a YouTube video, “One Semester of Spanish – Love Song” (Figure 5.10) which plays on the humorous gendered role of an English male, named “Mike”, who wants to learn Spanish to impress Latin girls. The video is educational, as it embeds standard new beginner sentences into its lyrics, which learners in Spanish are taught when first introduced to the language. When shown it, did the students manage to interpret the song’s humor?:

- R: The YouTube video today. Do you think they understood the irony behind it?
- I: There is something about the setting. If they had seen it alone, they would have expected it to have some humor. When they arrive in a school situation, then it’s like nothing for them that’s fun. It’s the school setting again.
- R: Do you think they managed to “decode” the message?
- I: If we had gone into it, then there is a singer and an open shirt. Some commented on that, but they seldom look further than that. They don’t see the cultural context. They haven’t been to Spain and seen Don Pepe, tried it out, and that flirting role, as he did in the movie.

- R: Do you think they managed to connect the gendered ideas in the video?
- I: They danced today. That was big. If we had done this earlier in the year, they would never have done it. They did not dare to stand near each other. You saw one of them, she took off. I see a parallel there. Here we have humor and they can misinterpret. They mistake the context and have little cultural references. There is a lack of background knowledge. I think that they will understand it, but you can get the opposite. When you talked about those animals, the marsupial, you saw the males in the vocational class. They use their imagination and interpret it very physically. They interpret the contrary, the physical. It appears that they seldom have any idea on what that means. They relate the unknown to their world and interpret it through that.
- R: There is a bit of a difficulty to decode the humor?
- I: The males in the English class are able to show creativity. They put it into their own context and think it will be really funny. And when talking social media, it is important to link it to the meaning of context. You have the cloud mindset that you exist here. But then I think: who are they? There are people who have gone through a school system that have lots of knowledge. They have the ability to say, "These thoughts here, those I do not buy". They can distinguish between the quality of the information and its value, from what has no value at all. They have such vast amount of knowledge in their pockets.
- R: But should they not now this, when they reach this age?
- I: Well, you see that, the lack of humor. It's the lack of knowledge about the culture or experience. That is when the Internet becomes dangerous. You just walk into a place and are not critical at all, because you do not have the knowledge to be critical. What you need to know is how to exercise criticism of the source you engage with. To do that, you need to know a lot. And that's what is a bit tricky, that students can lack that and independence. That's where we must help them. You can say that this student may enter that level and work alone, but to get there, that requires that you must have some basic knowledge which lies in yourself.

The teacher returns to point out similarities and experiences as seen in the news round, the importance of contextual and prior knowledge of a subject. The YouTube video indicates that there is a contextual gap that needs to be filled. The students' ability to interpret and relate YouTube videos to their own experience differs. The students merely demonstrate the capacity to point out observable traits in the videos, but seldom demonstrate the capacity to perform active interpretations. They have difficulty in connecting pieces of information to form knowledge as a larger picture. This indicates challenges with working with social media in a foreign language; the language itself and context can be a limitation:

- I: It's very much about that. Subjects are different. In foreign language training, you start very low. You have to give a lot of yourself all the time. In English, it is different. In the discussion about New Zealand today, they gave a couple of suggestions. My statement was, "What do you know and where is New Zealand?" And I got something back, "border control". That led us to a discussion on some issues. And we shared, but in my Spanish class, I have to give, give, and give. And you just feel completely empty at the end. Where does it end? It's very exhausting to work with foreign language training at the beginner level.

The challenges in creating engagement

Another theme that returns to dominate her classes is the experienced absence and differences in willingness to engage in class. The teacher has many times entered her classes with the intention of having high learning intensity, which could lead to interaction and sharing of opinions. This is experienced differently in both classes. She attempts to challenge her students to move over to the Web 2.0 world, but they pull back, craving to remain in the Web 1.0. In the English class, the students prefer to work under a textbook regime and often focus on wanting to work with assignments. They wanted more “structure in class” and often asked when they were going to return to using the textbook. The vocational students questioned the use of social media. She speculates as to whether her learning activities are too complex, leading to the question of how she can challenge them in new ways:

- I: I don't want to give up. My goal is to make them autonomous, so that they can be able to learn when they leave my class, when there is no teacher around. Until now, I have worked with reading. I try to teach them a set of strategies they use, so that they read a bit critically. It's the same principle when you read a book. This is important, when you consider their preparation for the final exam. If we only do assignments and read from the textbook, heavens no, the textbook has many shortcomings.

There are examples of engagement in class occurring, but these appear in face-to-face relations where bonding is already set between the students. Students prefer to work either alone or with others they know well. But there are exceptions in the English class:

- I: I saw an example with Ken [a pseudonym] and Jake [a pseudonym]. For him, it costs nothing to ask for help. When I asked, “Do you need help to read a text?”, then he said, “Yes, I do”. Then you can sit together with Ken, he can help you. I saw that he considered it twice, but it helped. It worked very well. The class after that, when they were reading something, then Ken said, “Are there any words you don't understand?” Those are the moments I noticed. That I thought was pretty good. I haven't done it with anyone else. Others sit very quiet and do nothing. Some are just able to write two sentences and ask for help.

The conditions in the Spanish class are different:

- I: I think that sharing works much better in the other class. For example, someone asked today. A student, Thomas [a pseudonym], asked something today and then they said, “We know it!” And then another student, Bob [a pseudonym] said, “I'll join you”. It was something that he didn't know. And then he sat there for two minutes and asked, “Can you explain it to me?” And then they came back again. There you have a culture, which allows you to do such a thing. We struggle with that in vocational, because there are so many elements that make it so demanding. It's a barrier, to get students to collaborate.

These aspects open for questions on why students refrain from engaging. She assumes that this is due to their earlier experiences from previous schooling. Although she cannot document it, she believes that many students have repeatedly been exposed and told about their language inaccuracies. This has led the students to take a personal decision not to learn or be receptive to new knowledge. This creates low motivation to learn.

A flipside to sharing and student engagement are other observable work patterns in class. The students seldom use a workbook, but submit their work on paper or on their blogs. This provides the opportunity to view how the students work in front of the screen before publishing them. In the Spanish class, the students are learning about Spanish culture and society. Many students make PowerPoint presentations and there are many cases of social learning. They browse the web for the information. There are small discussions between students sitting next or across from each other, where they evaluate and comment on what they have retrieved. This can be factual things, such as where a student found a picture, or the name of a city. I often overhead students correcting each other if they looked up the wrong city. The male students are especially keen on finding out more about football. Several have FC Barcelona or Real Madrid as their favorite clubs. When putting together their presentation, they frequently use Google translator to translate and extend their Spanish vocabulary. When they encounter something, some students tend to ask what it means; the teacher can then stop and explain the context behind the retrieved piece of information.

- I: Foreign language training is bit special in relation to that. You have two levels. When you start with beginner training, you work with “knowledge telling”, you talk about me, I, here and now. You begin thereafter to expand that sphere, that’s how you widen your language repertoire. There are only subjective thoughts, maybe a few sentences, something about a culture, history, and geography. But when young begin to get a little closer, as in the English class, you use what is called “knowledge transformation”. That means you can read on the Internet and should be able to extract information, so you can use this information in conjunction with your own thoughts. Then it becomes a kind of symbiosis between what you think and the information that you collect. It’s when you’re able to use it in your own context, that it becomes learning.
- R: Is that enabled in the Spanish and English class?
- I: In the Spanish class, some of the reflection is in Norwegian, because they don’t have enough knowledge about Spanish to reflect. This has something to do with how mature they are. When they use our mother-tongue, their reflectivity level increases with their language ability. In foreign language training one has reflectivity, but you don’t have the ability to express how you want it to be expressed. Like today, many of the male students liked when you talked about football, that’s a hit. They got more background knowledge on Spain and FC Barcelona, which they can use when they are to write something in a new context. That’s important.
- R: But what about schoolwork they publish?
- I: It is still straight from the heart, reproduction, to a certain extent.
- R: You find it so?
- I: Yes. Very few try to be creative. For example, when they talk about their family, they write about their names, how old they are, what kind of job their parents have. That’s standard. Everything beyond that is creative. Then they have to play with the language and they have to choose things they want to talk about. One student has a dog. On a language level, that is creative. It’s not what you ask for, but he added it anyway.

This points back to the teacher still being cased in her “unwanted” technological framing, where she works within a Web 1.0 approach:

- R: Do you manage to work with social media in the vocational class?
- I: I'm not where I want to be. Their activity on the Internet is reduced to YouTube and reading. That's a Web 1.0 approach.
- R: I interpret that you are working a bit uphill?
- I: I look at what I am doing now, what it's called: zorbing, hellisking, bungee jumping. I gave them 15 minutes. During that time, they made a PowerPoint, they found images, concepts, and Youtube. Then they used them. It was a specific assignment. If we do a project there, they will use the digital. There are several stages within the digital, Web 1.0, which is "read-only". I don't have any problem working with that. It all depends on what we are talking about. Today, the material was from the textbook, plus we went online and searched up information about the different topics. What I want is to get to real communication.
- R: And that is hard?
- I: They need to have someone at the other end. But with the reluctance they have, I thought that this could be part of the project. We'll see how it goes, then I'll have to contact someone through the web and ask some questions, try to get answers, get into the digital communications.

Framing recursive patterns

Six months into the school year, we can observe that patterns are routinized. January is a "turning point". The teacher's model is standardized. The challenges she faced during the fall semester are gone. There is a perception of seeing that learning takes place. She has tangible learning results. Half of the school year has allowed her the possibility to create a learning process and evaluate in retrospect what came out of it. This is utterly fortified, as the students have received their first grades and know where they stand. The learning environment in both classes is managed and settled in. There are fewer incidents of student misbehavior, but the teacher struggles with creating conditions for sharing and engagement. She has challenges in obtaining a foothold for a standard of learning she wishes to perform. She tries to motivate students to reflect more and be creative, but this is contradicted by their unwillingness. Many students seldom perform beyond their own ambitions. But this is linked to other aspects, foremost that using a foreign language in a social media learning design is difficult. She is working around certain tools: YouTube, PowerPoint, blog and sometimes the textbook, reflecting that she feels glued to the unwanted Web 1.0 frame.

February 2012: The meaning of collaboration and self-organization

In February, the teacher finishes certain themes and starts new ones. The students in the English class finish their work on indigenous people in Australia and New Zealand. Instead, the large inter-class or cross-disciplinary project is launched, the "*funkis* house" or "passive house" project. Three teachers from three different subjects – English, Norwegian and vocational studies – are going to work together, and so are their students. The vocational students are going to deep-dive into a theme of their own choosing and work in groups. It is a massive undertaking, demanding coordination and organization across subject boundaries. At the end of the project period, they are to present their work and be evaluated in three subjects. The Spanish class, meanwhile, continues with learning more about Spanish culture and geography, but ends that theme and begins a new theme, Spanish cuisine. They learn about how to order food in a restaurant and the common Mediterranean eating hours.

Making sense of collaboration and its managing and organizing

The learning activities allow the teacher to explore the pros and cons of collaborative learning in more detail. The lessons often consist of students working together and her role performance is to supervise them. We learned that previous learning activities have proved to be variable in that regard. There are differences between the classes. Moreover, there are differences between the students in each class. This has caused the teacher to point out a couple of contradictions, which academic theorizing fails to grasp. On the one hand, collaborative learning is a complex undertaking, which requires detailed management by the teacher and can happen beyond a teacher's control. One is confronted with another reality than the one described in any textbook. On the other hand, teaching students the art of collaboration can work against individuals at final assessment. At the end of the school year, they will perform a written exam by themselves, which is an individual effort that will not include any collaboration. The question remains: what is the good of collaborative learning when it will never be evaluated or count on your diploma?

- I: How I put together classes, in relation to working collaboratively, is where they can work independently, that they can do at home, if they don't use Facebook to talk about homework, or "cut and paste", or something like that. At home and individually. At school, I can also use individual work. What happens then is, if you haven't tried it, then the definition is strictly individual. We must deal with it, because the final exam is individual. There are no group exams. You can say that the view defined in recent education reforms is behind on what is said in the curriculums, because most work under a socio-cultural approach. Thus, you learn in a context. When you look at how major projects are organized in large companies, working in teams is essential, but when it comes to assessment and achievement, then it is individual. The examination procedure has a "wash-back effect", which is made visible in the classroom. They have to learn to be alone. It is also the case when we meet reality. It's fair enough. Individual work occurs in tests. Otherwise, I see that individual work often slips into a kind of dialogue with those they have around them. There may be one or two students, sharing things, asking questions in front of the computer, it's very often collaboration between them in front of the computer. It's often informal, individual work where they form a network, around where they sit. And, so in language learning, I have to build up a competence, before I can put them to work in groups. I can't just ask them to do "it". They don't have the vocabulary. Then I need to have a kind of job for them first, which is led by me. I use a lot of choir singing, which includes the whole class, the whole group. They say something and then they repeat, repeat, and we repeat. And when the work is done, I can put them together in groups of two, because two persons in a group are very harmless in terms of language barrier, when you're a little afraid to make mistakes and stuff like that. I use a lot of pairs, if they're not only sitting at their desk. I try very much to take them up, change the context, especially orally, they must stand and sing. I've found it works. They are much more willing to talk when it is informal and standing. Or they can sit, when they group. And then you have the slightly larger work that goes on teamwork, which goes on when you have four or five in a group.

During the course of the "*funkis* or passive house project" many vocational students work in pairs, mostly with someone they know beforehand. Many choose "passive house" as the main theme and conduct research in class. They write short texts and compose PowerPoint presentations. The teacher helps them with this work. This pattern seems to work best in both

classes, but in the Spanish class, it is also common for students to work with new and close ties. Experience shows that groups consisting of more than five students often prove to be non-effective. Compliant students will carry out their assignments, while others can abuse that to complete non-relevant learning activities. Other times, strong students can outcompete and dominate less resourceful ones. Very often, she lets students work in pairs or in groups consisting of four members. She is skeptical about groups consisting of three students. There is neither any “optimal” or “most effective” way of working either, implying that there is no criterion to evaluate if students work “best” alone or in groups. The learning activity, motivation, and context influence this:

- I: Such a question is not relevant. It depends on what you are learning. If you’re working in groups, you’re self-organized. Then you are able to understand a learning objective. You are able to find work and assignments, to achieve a goal. You’re also able to evaluate it yourselves to reach that goal. It’s the ideal mindset in group work, where you put people together. It requires a lot from students. You can’t expect it immediately from students.
- R: How do you think they work in the Spanish class?
- I: It depends on the mood of the day, the theme, and all that they bring with them into the lesson. This is crucial for what works. Sometimes the atmosphere can be like that. For example, during this winter, several times they worked individually and it was a bit quiet. They sat and chatted with the one next to them. I’ve had very good experiences with matching pairs, where one pairs students who do not usually sit together. You raise intensity, when they do not know each other that well. It’s not so easy to shirk, because you do not have much else to talk about. I think that pairs work very well. This can go with four students, but then there must be a slightly different concept. But when I started working with collaborative learning, things are now different. I have a tool where I can make all equally important in the groups. It might work.
- R: How is it in the [English] class?
- I: Individual work partially functions, larger group, yes or no. It’s so different. But they express a desire to do something else. They want to be part of the project we’re working on now. That means they must form groups and work together. They have themselves an intention to work together in groups, a perception that it is motivating and fun. But when I start to look at the learning outcome, we as teachers need to begin to do things that really tighten up or demonstrate accountability in those kinds of groups. Because they often can’t make it, they have little social skills to work constructively in groups. That’s my perspective on it. There are some who’ve got it. In the vocational class, I divided [the students] into three groups. The groups were put together based on my experience, in terms of how independent they manage to be, which was totally reflected in the submitted assignments of the group that worked well. They made a video, they discussed the goal, the questions they were supposed to ask, conducted the video interview, set it up as a group, and presented when they were supposed to do it. It was just one of all three groups, only one. In the two other groups, we saw that none of them took the responsibility or the initiative as in the first group who performed well.

The main challenge with student collaboration is attaining progression and sustainability in the course of doing assignments. Moreover, it is to make them self-organized enough, so that they manage and complete assignments without too much of the teacher’s intervention. The students in the Spanish class are perceived as capable of act independently, motivated and accountable

for their actions. But this can sometimes be contradicted by previous learning experiences. The teacher assumes that some students have been formed in their attitudes by how other teachers have organized and managed collaboration. They can be accustomed to too much teacher intervention, as some teachers have overplayed their role in collaborative learning processes, as they enthusiastically can have taken on the role as the “engine” and done the work themselves. Sometimes this is required, other times it is not. Assignments can demand a teacher’s explanation of a particular concept, but students can take the advantage and free ride or hide behind that. This means that there is difference in how autonomous and self-organized students can be in succeeding in collaboration.

Collaboration is never anything but challenging. Its success is explained in terms of a “depending on the situation” argument and a diversity of other factors that the teacher relatively controls. An important factor is prior student motivation and situations encountered just before collaboration is going to start. For example, when students enter a lesson, they have bonded with others and tend to sit with them accordingly. The teacher has good experience that students can work together with ties they know well. Other times it will not be the answer. To ask students, who normally do not work together, to do so can lead to other conclusions. This applied in the English class, as she knew that putting certain students together will seldom lead to successful collaboration. But sometimes she sees that students enter her classroom and sit alone. This is a mere hint that situations taking place in *other* classrooms are influencing how well she can get her students to work together, a factor that surfaces in the large cross-disciplinary project:

- I: When I look at how the class relates to their main teacher, and when he enters, I get a bit stunned. Now, I think, “Aha! now I understand why I struggle like that in class”. Seventy percent of their teaching takes place in the workshop with the contact teacher. When I only have two hours a week, I have little influence. It is difficult to make changes, based on the composition of the class there, because I think that I can help to damage or create good learning processes. I can create a negative learning process very fast. I could have done it. Now that we’re having this project, I can define who should be working together. The last I heard about the project, was that their main teacher hadn’t given any information about it. The students knew nothing. So one asks me, “Can I work at home?” And in that question, there is plenty of info, which I interpret. Ok, here it is three times. I don’t need to be at school, I can stay at home. And when deadline approaches, it is about submitting a minimum. As teacher, you don’t get motivated. Should I allow that, so he can work alone home? No. He needs to learn to take responsibility.

The continuing challenges in creating engagement

Another phenomenon continuing to influence classes is the students’ partial reluctance to engage and share. The students are in a print domain. They are perceived as being more socially present than active, a trait the teacher has often sensed as having an extension into the digital:

- I: I think that there are many parallels between students’ behavior in online communities and the class context. There are many who are online and are only there. There may be several reasons for that. In the class context, you have also the same, they are only “there”, somehow present. They seldom contribute. It’s no wonder that it reflects itself in the digital context.

She believes that their disengagement is clearly linked to the grades they have just received. Grades institute a personal understanding on where students stand in the terrain. Grades are a factor inhibiting learning, resulting in the learning process turning into a matter of getting a good grade more than actually to focus on acquiring new knowledge:

- I: Do you know what happens? They get grades. I'm skeptical. You don't learn because you want to find out about the world, you learn to get grades. And then that grade defines your position among others in class.

Creativity and curiosity are smashed. The will to learn a new language stops. The other side to this is how she repeatedly attempts to encourage the students to respond to her questions. She asks and asks, but struggles in getting the important reflection going. Many students are silent and stare into their laptops:

- I: I get little response. It is so frustrating ... That's what I'm trying to achieve. When I sometimes look at a student, I often see a glass wall with him or her behind it. And then it becomes like, "Are you talking to me, or what?" That's the way I get feedback from them. It's so discouraging.

This threshold extends into the digital. The students in the Spanish class are learning about Spanish cuisine. For example, she has asked them what they want to learn more about. And many want to know words and expressions that can be used to order food in a Spanish restaurant. This has practical and real-life value, as many of the students are likely to go to Spain on their winter holidays. The students are to practice their oral skills and make dialogues and record them on GoAnimate, a cloud-based platform for creating and distributing animated videos. The videos are to be published on their blogs, but very few complete the task:

- I: I like to test things. The last time, they were supposed to create a dialogue, to work further with the restaurant assignment. I wanted them to use GoAnimate for that. I wrote down the website and they could make the dialogue there. Only two students did it. Then, I think there is a threshold for doing it. I don't think it's just laziness, but there is a threshold, to publish anything orally. It is much easier for them to write. When they do something verbally, they think it is a bit scary, in a way. So, that's where I just have to continue to push on, to get them to understand that this is really not that dangerous.

Framing recursive patterns

Seven months into the school year patterns are routinized. February is characterized by examining the meaning of organizing and managing of collaboration and self-organization. There are no incidents of student misbehavior. Instead, the teacher is met with a student conformist culture, a boundary she tries to overcome. The experience from January continues. She struggles with creating conditions for sharing and engagement. She seeks to motivate the students to reflect and be creative, but this is contradicted by their unwillingness to do so.

March 2012: Assessment time, comprehending the fruits of her work

In March, the teacher completes certain themes and starts new ones. The students in the English class terminate the large inter-class or cross-disciplinary project. The Spanish class ends the theme on Spanish culture and geography. Both classes are now starting to prepare to work with themes as yet uncovered preparing them for the final exam in May.

The management of social boundaries and the learning environment

Creating a positive learning environment and managing social relationships between students have been important throughout the school year. This has changed, foremost because incidents of student misbehavior are non-existent. The teacher still detects that the students hide behind a mask of conformist youth culture, which can appear impregnable. This applies to both classes. The students are assumed to share a sense of loyalty between them, which can enact as a rigid *social boundary*. Sometimes she perceives she is breaking it. This has consequence on her role performance. She experiences a forming of group belonging among the students, where she often has been required to act as a form of mediator:

- I: That's what has been my challenge in the vocational class. It's all about relationships. You are met with, it's "the teacher" against "us". It's not that easy either. They form a group around "us". It is "us" and "them", as it was with the two groups that were in the old school. In my conversations with the students, they talked about "them" and "us". I had two groups who didn't work together. And then there was me, who was a kind of a third grouping, who no one could be with, because if you did that, you would lose face inwards within your own group. There are many complications like that that is hard to deal with. What I think about in retrospect, in these kinds of circumstances, you need to break everything down to the individual. You need to have a relationship with the single individual, you can't talk to the whole class. You have to see the individual, and then you need to work towards him or her, and allow the individual to define him or herself, to have a chance. You can't define him or her as part of a larger group. I think it's wrong. If you do that, you don't give the student a chance. If I define a student as a "weak learner", he or she will not have the same growth possibilities, as if I would have met that person with an open mind.

It has been important to break down the "us" against "them" opposition. And a way to work with it has been achieved through performing individual student conversations. These are experienced as a success, but have also taught her about failures. She has succeeded with improving the language skills and learning progression among several students. Some students are very satisfied with her classes and the feedback on their work. But the conversations have a clear benefit, allowing in-depth supervision of each student:

- I: When I have one-to-one conversations, I manage to go in depth. That's what gives the conversations quality. I have the competence to analyze texts, to see patterns, to get them to see the pattern, to see what is needed to make your text good. Where are you on the road, where is the pattern of your competence here? And how can patterns be developed? That's what makes supervision good. And now I manage that, because I've worked a lot with texts. I manage that here in the high school and in supervising of academic texts at the university. Now, I get good feedback from students on the conversations I have had with them on writing. It's a code I have cracked, which I manage to use in relation to feedback, in relation to assessment, feedback, in conversations. I don't manage the writing. I must have a conversation to do it. That works, because I now work with in-depth learning.

The other side to the social boundary between the teacher and the students can prevent in-depth exploring. This has surfaced as a recurring theme. She sensed that students merely settle with scratching the information surface, regardless of whether it is digital or print. Important reflection is lacking. During March, she reads out loud short stories from the textbook, as a way to motivate the vocational students to reflect more. To turn that into a success demanded a step-by-step process, where one takes a piece at a time:

- I: It's hard. I try to take them a step on the long road. I don't think I will finish with it. The short story we read today is advanced. In a way, one must be very knowledgeable to understand it. It only had two pages. They understood the symbolism. Jack is the smartest. He spent some time figuring out that a pub with four corners reflected four people, right? The black, is Africa, the continent. And then you have the lady who enters. They spent a little longer to realize that the lady was more than just a lady. But they got it in the end.

To accomplish in-depth learning has demanded a lot of "pushing" the students, where the teacher has taken on the role to challenge them and draw them out of their "comfort zone". She has encouraged them to enter into dialogue and learn from social interaction or relationships. She perceives this as one of the most effective ways to learn and practice a foreign language. She has accomplished this factor with other students from previous classes. Once, she managed to motivate students to go online and seek out people who have Spanish or French as their mother-tongue and engage with them. Students have interviewed Spanish footballers or written e-mails in French to hotels in France to get information on holiday activities:

- I: I had a project that succeeded with it. It was in a French class. They were able to write simple sentences. And then there was the task, to get information. You should ask someone for info and get a response. You should be able to communicate the answer you got. That was what the task was. A student was going on holiday to France with her parents. She wrote a long email where she asked for different things in a hotel.

This is contradicted, as students bring with them other sets of expectations to class, something that appears to have elevated with the arrival of social media. The students bring with them their leisure activity and social habits, a factor that influences learning:

- I: What happens is that students bring with them their leisure culture into the school culture. It is a competition to use it as a digital learning arena in a school context. This is the battle that teachers are constantly fighting in any classroom. There are plenty of battles to fight. We don't need that one as well. Before you manage to cover your material, many students have surfed and not paid attention. Now it is very visible, when they go online just to surf. Before, they used to look out the window. The Internet surfing is very clear. You see it more than before. It is not a new phenomenon. It has steadily been there. People don't follow. It becomes more and more evident, and more of it with social media too. Some students are not able to differentiate between the leisure culture, which is online, and the learning culture which should be online, which we then want to have in school. It has taken over. Then, many teachers think, "What do I do?" It doesn't work with sanctions, it doesn't work by asking the students to put away the computer. It just pops up after ten seconds. That's what you see. What do you do?

The presentation of the passive house project

Figure 5.11 An example of a *funkis* or passive house.



The vocational students present their work from the cross-disciplinary project. The students are required to have written a text in English and perform an oral presentation in Norwegian. The goals behind the cross-disciplinary project are several. The students are to show that each of them is capable of working together with peers; that they are able to present a theme; they can demonstrate the capacity to form a research question and answer it. The teachers have given them specific assessment criteria too. The English text must consist of an introduction, a clear research question, contain examples and facts, show the ability to assess the examples and facts by their own thinking, and have a conclusion. For the Norwegian oral presentation, they must be able to use a presentation tool, fit their content to an audience, interact with the audience when they present and have a positive body language. All this must contain vocational terms, words and expression, reflecting that they have mastered architectural knowledge on how to build a passive or a *funkis* house.

All the students and the three teachers are present during the presentations. The vocational students have worked on their assignments over the last weeks, grouped as six pairs. All the students use PowerPoint and swap roles on who presents which part of their work. Many present with a prepared manuscript and they read it out loud rather than having an engaging discussion with the audience. Their Norwegian teacher takes on the role of opponent. He asks questions. After each presentation has ended, he performs friendly critiquing and gives the students their grade. The presentations are impressive and the vocational students show a different side of themselves, which we had not seen before. Their work is structured, has a clear meaning, and clearly demonstrates that they can perform and do well, which creates confusion. The teacher is flabbergasted, but discovers that her male colleagues address the students in a different way. This is apparent when the male Norwegian teacher presents his evaluation of the students' work. He uses a masculine code of conduct or communicative practice that the male students pay attention to. They respect his assessment, which confirms the teacher's assumption that her gender is not to her advantage.

Concluding the blog project on making prosumers

We can pinpoint interesting publishing patterns, which concern interactivity lasting through the school year. This is displayed in Figures 5.12 and 5.13. In the Spanish class, we see that interactivity is characterized by “take-off-and-drop-down” curves, implying variations in the number of entries for each month. There are peaks at the start of each semester, where September singles out as the month with the highest degree of online interactivity. In September 2011, the students had a total of 62 entries. The period from January to March 2012 appears to be the most sustainable, as all the students posted approximately 30 entries each month. Breaking down each student’s publishing pattern, a student published on average four posts in September and issued about one or two digital items from January to March. We also find gender differences. On average, each male student published roughly five posts in September, while a female student would have about three posts. The figures for January to March show the same for both sexes, varying between one and two entries for each month. Among the vocational students, we see little interactivity. This shows a drop and is explained by the fact that the blog project was cancelled in September.

Table 5.9 Total blog entries in the Spanish class.

Student	Gen	Aug. 2011	Sep. 2011	Oct. 2011	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012	Mar. 2012	Apr. 2012	May. 2012	Jun. 2012	Total
S1	M	1	9	1	2	0	1	3	3	0	0	0	20
S2	M	3	7	0	0	0	0	4	2	0	0	0	16
S3	M	2	7	1	4	0	1	0	5	0	0	0	20
S4	F	2	4	1	1	0	0	2	2	0	0	0	12
S5	F	0	4	0	2	0	1	0	3	0	1	0	11
S6	M	2	5	1	1	0	2	4	3	0	0	0	18
S7	M	2	3	1	3	0	0	0	2	0	0	0	11
S8	F	2	2	2	1	0	3	4	2	0	3	1	20
S9	F	Published on wiki											
S10	M	0	1	0	0	0	4	4	3	0	1	0	13
S11	F	0	3	0	0	0	4	1	2	0	0	0	10
S12	F	0	2	0	1	0	6	1	1	0	1	0	12
S13	F	0	3	1	1	0	2	2	3	0	0	0	12
S14	M	0	1	0	3	0	2	2	1	0	0	0	9
S15	M	2	7	0	0	1	1	1	1	0	0	0	13
S16	F	1	3	1	1	0	1	2	1	0	0	0	10
S17	F	2	1	1	3	0	0	3	0	0	0	0	10
Total		19	62	10	23	1	28	33	34	0	6	1	217

Figure 5.12 Total blog entries in the Spanish class.

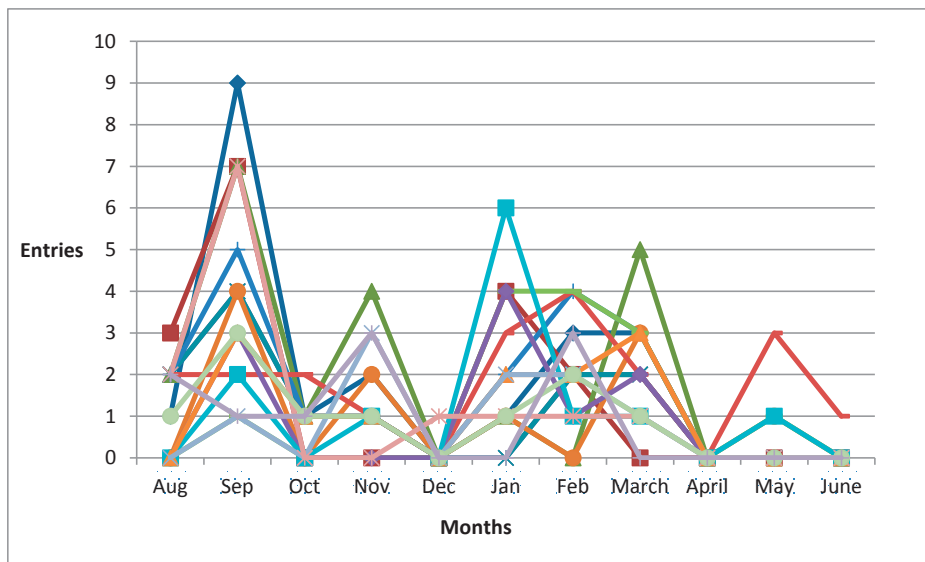
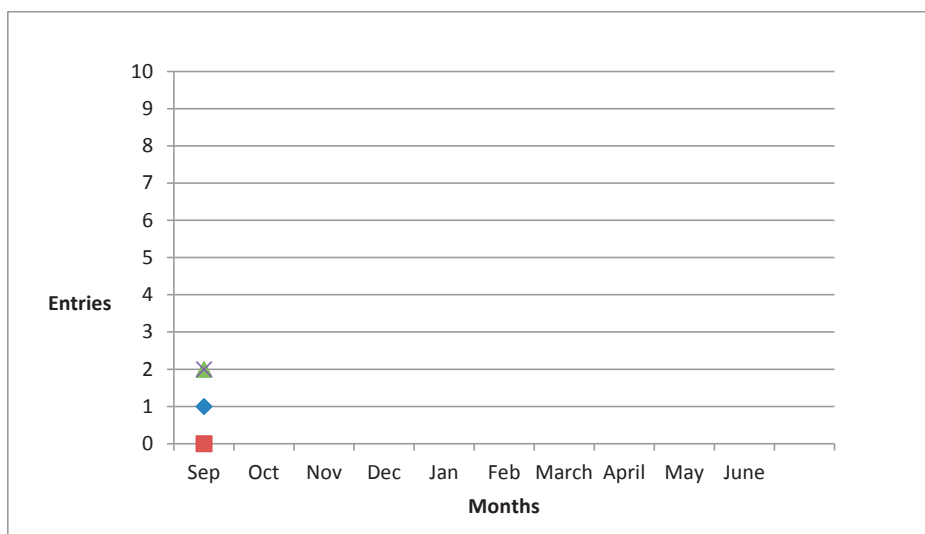


Figure 5.13 Total blog entries in the English class.



The differences are interesting and require consideration. The reason why certain months have lower levels of activity than others, for example, is due to the content of the assignments and the organization of the school calendar. Some assignments are small and can be published quickly, others need more work. That certain months have few or no entries can be explained by the fact that the students are on vacation. We can expect that the Spanish students produced more posts that were not published. Many students had produced digital items, but submitted them in Word documents and other digital formats. The contradictory pattern that male students lead the way in publishing in academic studies but are reluctant to engage in vocational learning is difficult to explain. The teacher is keen to make sense of *why* she succeeds in one class and is only partially successful in the other. She believes that it has to do with the nature of blogging.

The students have “tested it” and are now more experienced, especially knowing what implications it can lead to. They are careful in what they publish, as it can backfire on them due to the risk of cyberbullying. The direct consequence of this has been the total revision of her English lessons. She could not work digitally, but had to return to an ordinary textbook classroom practice:

- I: It has been a huge problem. It’s school, I guess. They become insecure and don’t understand what I want. It’s not the perception they have of an English class, which should be about reading texts and doing tasks. That’s what they expect. To be autonomous is something quite different than following a standardized pattern. If I should succeed with teaching, to make them think in terms of critical literacy and to work in the social media world, they need some tools, to be critical. Otherwise, it might go pretty bad. They have some tools, when it comes to blogging. When it concerns public understanding, they know that. But the important task of making a text into knowledge, they lack that skill. That’s what I’ve tried to do.

The vocational students’ refusal created other challenges. They were required to submit written texts on paper or in their individual folders on the high school’s LMS. Many did not do that, creating difficulties in assessment as the teacher lacked sufficient material to set their grades. She had to write letters of concern to several students. Certain students developed strategies to avoid submission. The typical indicator of this is students who repeatedly asked for postponements.

- I: This type of student fits a pretty clear description. The first week, all the students come with rucksack, paper, and pencil. After a week, they stop bringing them with them, especially the vocational students, while the students in academic studies continue. What happens then? There are not those kinds of expectations when they enter class. They manage their surroundings and patterns really fast. There is something about the expectations they impose on those kinds of groups. We must probably take some of the blame for that.

The other side to this is how a combination of ongoing expectations and student strategies for non-submission can create a norm, which can be institutionalized. The students can adopt it, a phenomenon she has experienced in the vocational class. This can potentially be reinforced when the students discover that there are no consequence of their actions:

- I: Because that’s what they discover, oh yes, haven’t submitted, oh, didn’t see any consequences. The next time after that, the whole class. And then it sets in. If that happens repeatedly, then we are not sending any good signals to them. They hear from others. Some students want to attend this school because they claim that here there is no homework at all.

She has managed to see positive learning results, especially how the vocational students write and structure good texts. Even disengaged students adopted her principles:

- I: When I look at their texts, I think certain students have learned a lot. One student wrote a type of children’s stories before Christmas. Just like, get everything out [on paper]; now he has structured his text. He was not able to do that. Now he thinks about argument and structure, where there is a red thread. He hadn’t done it before. I asked him today about it. And he said he had grasped the principle,

to build a coherent text. And then there is a discussion where the students tries to criticize me, which is pointed against me, as the teacher, “No,” I said to him, “I focus on your text.” He has contributed almost nothing and seldom been a team player. He has picked up some things. People work through relationships. If you have a good relationship, you achieve something, if you have a bad relationship, then you get that resistance. I am unable to help students if they don’t write anything. I can’t make them better at writing if they do not say anything, and I can’t make them better at reflecting orally.

5.6 Summary

This chapter presented the second local model, *authentic learning situations*. I examined a case story showing how use of social media is embedded and socially constituted in an educational organizational context. The practice of the dissertation’s second actor was considered, a female teacher working part-time in foreign language training at a high school. My intention has been to describe the two classes she taught in the school year 2011/12, a vocational class in English and an academic studies class in Spanish. The teacher’s overall goal was to create curriculum-based lessons organized around the use of social media, implying an attempt to decouple from a textbook learning design. This involved motivating her students to learn a foreign language by using social media and information derived from World Wide Web as a source to knowledge.

To show this argument, I divided the chapter into six parts. The first part recapped my model’s idea. Here, I attempted to link it to a theoretical horizon. I was inspired by combining parts of Orlikowski’s concept of *technology-in-practice* with Schön’s reflective practitioner, to create the concept “*reflective-technology-in-practice*”. The second part contextualized current discourses on the use of digital tools in the Norwegian K-12 system. I emphasized that use of social media is not common practice among teachers. The third part outlined the teacher’s background. We learned that she worked as Associate Professor in foreign language training at a teacher education, but worked part time as teacher at a high school. She had worked digitally for years and was an innovator in her field. The fourth part examined the design behind authentic learning situations. This was construed around decoupling from a textbook learning design to work with social media. I outlined its conditions and principles for organizing. The fifth part looked at the teacher’s implementation and experience of her model. The latter was empirically illustrated by narrating how and what happened in her two classes, on a monthly basis, from August 2011 to March 2012. I examined particular themes and activities that dominated the classes. My conclusions and findings are addressed in Chapter 8.

6 Relation Platforms

In 2008, a group of employees working in a city municipality's IT Department – a public administration I have called the Echo Organization – took the initiative to found a social media competence group, a *beta*, which I have called the Beta Group (BG). Soon, the BG comprised of employees from the Echo Organization's IT and Communication Departments, marking the start of working professionally with social media in organizations. Over the years, the BG members began to engage in social media platforms. From there, the BG members examined social media, which they systematically tested out where they work. These activities contributed to the creation of their own definition of social media, which they called "relation platforms based on user-generated content". The BG members also authored the municipal guidelines for use of social media fitted for use in public organizations. The definition and guidelines are the result of much research, experimentation, and reflection on their own use and practice of social media, forming a knowledge production process that has been subject to changes as the group interacted with ongoing municipal priorities, goals, and activities. The definition and guidelines consist of symbols and expressions adopted from contemporary web culture and is a genre repertoire on how employees can use social media as part of their work practices, creating an organizational literacy on social media.

By using a bottom-up perspective, this chapter chronicles the events in this knowledge production process, showing the dissertation's third local model, "*relation platforms*", illustrating how social media embeds and socially constitutes in an organizational context. The practice of the dissertation's third actor is considered and examines how employees in organizations work professionally with social media and build specialized knowledge. To show my argument, I cover it over the chapter's five parts. The first part recaps the model's main idea. It connects the model to theoretical concepts used in organization research to explain the formation of communicative practices in online communities in organizations. This is done by discussing the terms *genre* and *genre repertoire*, which are combined with perspectives on how professional practitioners create knowledge and understanding by reflection on their actions and experiences. The second part outlines a tendency in Norwegian organizations to manage social media in professional ways, which is illustrated by the rise of social media competence groups, the *betas*. The third part presents the BG's organizational affiliation and crew. The fourth part examines events in the BG's history, which played an important role in the knowledge production process leading to their self-created definition of social media, an analysis covering the period from the fall of 2008 to the spring of 2012. The last part summarizes the chapter.¹⁵

6.1 Part I: Orlikowski and Yates' *genre repertoire* and Schön's *reflection-on-action*

To frame *relation platforms* theoretically, I apply parts of Orlikowski's brilliant work. In the 1990s, Orlikowski collaborated with Yates on a series of research papers. Together they explored the meaning of "genre of organizational communication", which they defined as type of communication characterized by a socially recognized communicative purpose and common aspects of forms (Yates & Orlikowski, 1992). Yates and Orlikowski's project was to push *genre* in a new direction. They argued that earlier approaches among literature researchers used the concept as a means to classify rhetorical discourses and literary works. Genre was used as an

¹⁵ The research perspective is explained in Chapter 3. This chapter is an extended version of a short paper, "What is "it"? The Sensemaking of Social Media in a Norwegian Municipality", presented at Stanford University, at Scancor's Friday Seminar on December 13, 2013, (The Scandinavian Consortium for Organizational Research).

instrument to determine if a text should be labeled a “tragedy” or “comedy”. But in the late 1970s, this understanding was outdated, as scholars started to pay attention to defining the term more accurately and relating it to the meaning of contextual reference, implying that texts should not be understood as isolated entities, but be regarded as part of larger social realities. Yates and Orlikowski emphasized that this took a turn when scholars started to change their understanding to include the meaning of social situation and human action into their definition. Yates and Orlikowski noted Miller’s (1984) work, which stressed that humans enact rhetorical practices or genre characterized by patterns of form and substance, meaning that genres are typified rhetorical action in the context of socially defined recurrent situations. This move allowed organization researchers to apply a new perspective. Yates and Orlikowski wrote that:

This concept can be applied to a wide range of typical communicative practices occurring in organizations, and it provides a new perspective on organizational communication that is both interactive and socially embedded. Thus, it allows us to examine the production, reproduction, and modification of different types of organization communication over time and under different circumstances. (1992:301).

Later, Orlikowski and Yates (1994) introduced the term *genre repertoire* to widen the application of the genre concept. This was introduced as a response to limitations in earlier work in organization studies (Donnellon, Gray, & Bougon, 1986; Eisenberg, 1984; Frost, 1987; Fulk, 1993; Fulk & Steinfield, 1990; Huber, 1990; Manning, 1989; Putnam & Poole, 1987; Rice, 1984; Sproull & Kiesler, 1986; Trevino, Lengel, & Daft, 1987). Orlikowski and Yates argued that the practice of communicating as a routine organizing activity had not been adequately explored. To counter it, they adopted a processual perspective aimed at showing how ongoing communicative practices in organizations can create social structures that are produced and reproduced and can change over time. Moreover, these can become routines and influence the ways that employees perceive forms of communication. This meant formulating a practice perspective and integrating structuration theory (Giddens 1984) and practice theory (Bourdieu, 1977, 1990), which claim that between human’s action and with social structures emerge recursive patterns and that the recurring interplays with routine activities “are grounded in the ongoing practical activities of human agents in particular historical, cultural, and institutional contexts” (Orlikowski & Yates, 1994:541). Furthermore, Orlikowski and Yates claimed that recursive relationships between routine activities and social structures are the medium and outcome of those activities.

Orlikowski and Yates (1994) discussed their perspective by examining the dynamics that play a role in the formation and structuring of genre and genre repertoire in a community in organizations. This starts with recognizing that genres are common forms of particular communicative practices – like memos, meetings, training sessions – that are socially enacted by members of a community and can serve as a template to realize particular purposes and actions. Researchers need to recognize the importance of certain genre characteristics. A genre is not always rooted in an individual’s motive to communicate, but is constructed, recognized and reinforced within a community, factors that can enable researchers to get insights into a community’s and an organization’s work practices. Orlikowski and Yates emphasized that genres are rarely homogeneous, but are separate, having the potential to create new generic strategies, implying that there are two types of interaction among genres. On the one hand, there is a degree of genre overlap, as we can find enactment of one or two separate genres in a community. On the other hand, genres are interdependent and are part of larger complex “genre-eco systems”. Orlikowski and Yates argued that genre can undergo changes, which are likely to occur when community members draw on past knowledge of a set of genres or introduce new ones, as these can be reinforced to conserve known ones or to create new ones. Community members can modify them too.

Further, Orlikowski and Yates argued that genres are not only *individual*, but can be part of a *set of genres* enacted by community members, which means to put greater focus on genre repertoire. Orlikowski and Yates placed genre repertoire to similar research perspectives to those organization researchers used in their studies of organizational communication (Clark & Staunton, 1989; Donnellon et al., 1986; Gersick & Hackman, 1990; March & Simon, 1958). To grasp the structuring process on how a community establishes its communicative practices constituting its genre repertoire over time, Orlikowski and Yates argued that we must pay attention to three aspects. First, the *nature* of a genre repertoire must be considered. This can give insights into a community's communicative practices. This can give information on social status, social identity, and organizing processes. It is important to analyze the *composition*, the set of genres making up the repertoire and its uses, which means measuring the *frequency* with which specific genres are enacted at various times by community members. Analysis of composition can indicate the kind of communicative activities that are practiced by community members, while use can reveal how often they interact. Second, the *establishment* of a genre repertoire should consider how and why community members enact a particular set of genres. Orlikowski and Yates claimed it is imperative to approach new ways community members enact genres and how they used them previously as members of other communities. Another way can be to highlight expectations that emerge from such enactments, which can "be based on knowledge of genre rules, members' prior experiences in similar situations, and their sense of what forms of organizing and interacting" (Orlikowski & Yates, 1994:547). Third, you should consider why *changes* in a genre repertoire occur over time when they are established in a community. The sub-theme is to look for *variation* in the repertoire composition. Orlikowski and Yates argued for grasping how changes are introduced inadvertently or deliberately by community members, which might occur in the composition of repertoire or in its use. There are certain dynamics in play. On the one hand, Orlikowski and Yates refer to "custom", which might be cases where community members attempt to reproduce past customs, but variations emerge by inadvertent slippage or improvisation. They called it "inadvertent variation", which means how the composition of a genre repertoire may be varied when new genres or variants emerge alongside or in place of older ones. On the other hand, there can be "reflective agency" which would include how members adopt new routines or change them by experimentation, learning or trying to switch to new routines. This is called "deliberate variation", which indicates how "new genres or variants may be introduced or designed through the deliberate action of one or more members, such as when members import a genre they have used in another community" (Orlikowski & Yates, 1994:548). Further, variations in genre repertoire can occur when genres become dormant or there are attempts to eliminate them. Orlikowski and Yates concluded that genre repertoires can undergo change when their uses change across time, which can be intended or unintended.

To illustrate their argument, Orlikowski and Yates examined the content of a vast amount of e-mails to identify communicative practices or the structuring of genres among a cohort of knowledge workers. This represented a community of computer language designers or an "ad hoc project organization" who collaborated on developing a standardized computer language that could be portable across computer systems. At the beginning of the 1980s, this virtual community of computer language designers organized and communicated their work across large geographical distances, a work which resulted in the Common LISP language. The designers hardly met during the work period and it is estimated that 95 percent of their work was completed by e-mail exchange using the U.S. Defense Department's ARPNET network, the technological predecessor of what is today known as the Internet. By using an e-mail system, they worked and collaborated "to raise issues, offer proposals, solicit opinions, suggest amendments and alternatives, debate language features, reach group decisions, and document

their results” (Orlikowski & Yates, 1994:543). Orlikowski and Yates sampled about 1300 e-mails from the correspondence of 17 designers, covering the period from December 1981 to December 1983, in addition to completing complementary interviews with the most important participants in the community.

Based on an inductive and systematic content analysis of the designers’ e-mail exchanges, Orlikowski and Yates identified the enactment of different genres. The analysis showed that the genre repertoire was composed by three genres – memo, proposal and dialogue – and one genre system – a ballot – that was generated and distributed across the e-mail exchanges. The three genres illustrated various interaction patterns practiced among the designers, while the balloting system was a self-developed community voting system. Orlikowski and Yates explain that this voting system was designed as a type of questionnaire where the community members voted on a series of listed items or statements or alternatives to solve matters the computer language designers worked on. The voting system was used to identify if the community members had reached an agreement on a matter. The data analysis found six ballots, each with all three interdependent message types, including different quantities of responses to each other. Orlikowski and Yates claim that the emergence and use of a genre repertoire “indicate[s] a group that organized itself around an informal yet intellectual exchange among peers rather than a formal project structure and methodology” (1994:561). This sense of “community informality” showed it could produce a powerful willingness and have an organizing capability. This is reflected in the ways the designers organized their work by abiding by their self-defined community genres rather than genres and practices imposed by an organization’s apparatuses. This is showed across several trajectories. First, the use and self-imposed presence of the memo genre rather than the use of an organization’s letter showed how the designers organized themselves as a temporary organization. Second, the focus on creating a reference manual rather than writing their conclusions in a report genre, showed that the designers were more accountable to their own professional community than to an external party. Third, the use of a proposal genre was more effective to the organizing process than applying a scientific or letter genre. Fourth, online conversations proved to be an effective means to create the design for the computer language they were set to work on. And fifth, the introduction and practicing of the ballot system proved to be a participative and practical decision-making process to complete their work in an effective way.

While genre repertoire emerged from Orlikowski and Yates’s (1994) impressive analysis, I use and complement it in a different way. My interest lies in using genre repertoire to understand how an actor tries to learn about a new technology and the new communicative practices it can enable, and the ways and challenges an actor meets when they to introduce them to an organization. I use Orlikowski and Yates’s work to frame how *relation platforms* are created as the end-result of a longitudinal experimental process. I am interested in exploring how the BG members used personal reflection and retrospection on their actions and practices to *create* and *structure* a genre repertoire or communicative practices connected to the use of social media in organizations. These were produced, reproduced, and modified as the members interacted with them over time in the organization where they work. This argument can perhaps be better understood by looking at the field of *reflective practice*, which can be seen as the capacity to reflect on action to engage in a process of continuous learning (Schön, 1983). Reflective practice is a tool in practice-based professional learning where people learn from professional experiences rather than acquiring knowledge from formal learning and knowledge transfer. Central to reflective practice is how a professional practitioner is not only concerned with reflecting back on past actions and events, but how he or she takes a conscious look at emotions, experiences, actions, and responses, and uses that information to add to his or her existing

knowledge to reach a higher level of understanding (Paterson & Chapman, 2013). The framework emphasizes that learning is part of a cyclic pattern of experience and the conscious use of lessons learned from personal experience. In this way, reflective practice is experimental learning where self-organizing and auto-didactic features are central ingredients. Reflective practice is foremost associated with the work of Schön (1983, 1988), who pinpointed that knowledge produced in textbooks, which he saw as containing “technical rationality”, had limitations to how practitioners perform and organize work. Schön (1983) introduced the terms *reflection-in-action* and *reflection-on-action* to represent phenomena that play a crucial role in embedding how professionals meet challenges at work with a kind of improvisational approach that can be improved by their practice. Reflection-in-action is defined as the ability of a practitioner to use his or her ability to reflect on feelings, emotions and prior experiences to attend to a situation more directly, while reflection-on-action is a “post-reflection situation” where practitioners analyze their reactions to the situation and explore the reasons around them and the consequences of their actions.

To show how the BG members created their understanding of social media involves addressing the ways they created and enacted it. This emerged from a creative structuration process, which gave social media a form or genre and could be recognized as a communicative practice. This had two sides. On the one hand, when social media first surfaced, the BG members sensed the *absence of a shared meaning* of what social media “was”. Social media was *equivocal* and definitions were hard to come by. When the members used the resources they normally use to stay updated on changes in the technology landscape, they could not give them descriptions of the new technology and how to integrate it into work practices. The same applied to where they work. Although they work in an organization possessing many resources, the members experienced lack of competencies from where knowledge could be harvested. Confronted with this, the BG members attempted to conceptualize social media and took the initiative themselves to learn about it. They self-initiated a large learning project, which involved drawing on past and present experiences and by looking to sources beyond organizational boundaries, as a strategy to form knowledge on social media. This consisted of enacting and self-organizing a “trial-and-error-practice”, where they tested, interacted and wrote about how to use social media in public organizations. The BG members broke down tentative definitions of social media, informal knowledge, and cultural influences related to the social media universe which they came across. These experiences were “reassembled” under their own understanding, which has been part of a structuration process that took different turns. This means that “relation platforms” is the outcome from an interpretation process, transpiring from retrospective interaction from situations they have experienced, which is based on making sense of a technology that manifested as ambiguous.

This reflection process has an *outcome* and *content* and reveals a genre repertoire, giving relation platform a substance that embodies a range of communicative practices on how to use social media in a public organization. This genre repertoire is culturally scripted as the result of continuous contesting, negotiating, and interpretation of experiences from the initiatives and activities the BG members completed. Here, we find that relation platform is ascribed a form, established as part of a community practice, and given a social identity and composition; how it varies in use and changes over time. These communicative practices acquire a clearer form when seen in relation to dominant institutional logics and practices commonly used in organizations. In short, the BG’s colleagues used a *one-to-one communicative* practice, which is personified by writing e-mails and filing work documents on a local computer file system. It is perceived as constituting a *private* and *individualized one-to-one* communicative practice, being part of an Internet computing paradigm. In contrast, communicating on social media

platforms is characterized by the stark opposite. Engaging on social media is the enacting of a *many-to-many* communicative practice, where multiple users contribute and receive information, where information is interlinked to different websites reflecting how humans communicate in communities. The many-to-many communicative practice *suspends the artificial boundary* between information and communication tools, a suspension making information non-private and visible to others. But how do you convince your colleagues to change from the individualized one-to-one way of communicating to adopt a new way of communicating? For the BG members, this has meant forwarding arguments in favor of abandoning e-mail to communicate on social media platforms. But this can seldom be accomplished by contending that people should just start using social media. More convincing arguments must be scripted. It is necessary to create a set of communicative strategies – or, to use Orlikowski and Yates’s term, a genre repertoire – consisting of words, expressions, and symbols, which play on a rich cultural language that favors networking and sharing of competences on social media platforms as having positive benefits on the work practices of the intended audience.

6.2 Part II: The rise of the betas

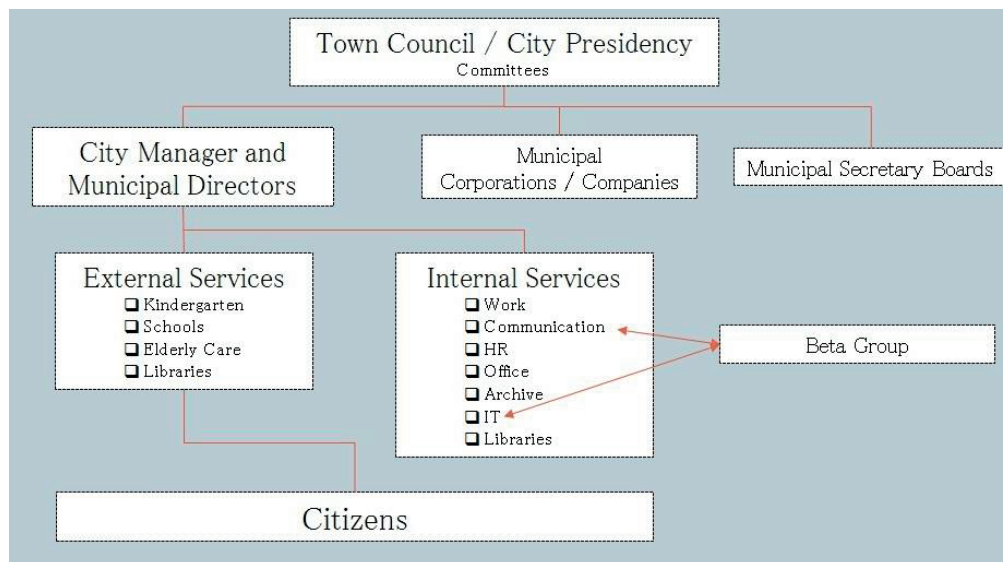
Since the 2000s, employees in Norwegian organizations have started to work professionally with social media. Organizations create official accounts on Facebook and Twitter. These are intended to display an organization’s voice to an external audience. It is common for them to be administered by employees with professional backgrounds in media and communication and journalism. These employees have “social media expertise” as part of their permanent job description. As part of this development, there has been a franchising of professional social media competence groups, so-called *betas*, in certain Norwegian municipalities and state-owned companies, reflecting an advanced management of social media. The betas are few, but have formed as either the result of local bottom-up initiatives or the direct creation of a management priority. The betas consist of employees with university education, consisting of from two to five members. The members hold master’s degrees in humanities or social sciences disciplines, like media and organization studies. The betas have taken on the role of internal service providers, where they support coworkers and departments who engage more directly with the citizens. They specialize in topics involving questions of new technologies, organizational development, internal and external communication, and new ways to organize work practice. The betas play a crucial role in putting social media on the agenda in public organizations. For example, they have written guidelines for use of social media and strategy documents, assessed the risk of using social media, evaluated available Web 2.0 services and acted as instructors for coworkers who wish to learn about social media. In this way, they take on the role of translating and interpreting social media into organizational life. This translation rarely takes place in a vacuum, but is negotiated between importing and exporting ideas and symbols between the external and internal boundaries of an organization.

6.3 Part III: The BG’s affiliation and current crew

Our BG is affiliated to a large public administration administering a city municipality. A simplified organization chart of the Echo Organization is displayed in Figure 6.1. The Echo Organization serves an elected municipal body – a town council or city presidency with committees – with a large population consisting of 200,000 inhabitants, whose important functions include management of schools, roads, and health services. The Echo Organization consists of independent units, departments and municipal companies, which enjoy a degree of corporate status. The Echo Organization divides its functions into “external” and “internal” services. “External services”, for example, are elementary schools and kindergartens that serve

the city municipality's citizens more directly, while “internal services” are municipal departments and units that assist and facilitate the external services and internal public officials.

Figure 6.1 Simplified organization chart of the Echo Organization.



The BG's members work in two departments in the Echo Organization, the IT and Communication departments. These are affiliated at a high-ranking level under the Municipal Director for Organization (MDO), which has licensed auxiliary functions inside the city municipality as a whole. In a way, it is a “smaller organization” supporting and running a “bigger organization”, where its main purpose is to develop and assist thousands of municipal employees. The MDO provides “internal services” to other municipal units, which produce the mentioned “external services”. The MDO is made up of several departments. They specialize in work environment, procurement, accounting, legal issues, office matters, HR, interpretation services, archives, and finances. The main task is to promote the most efficient operation and provide excellent administrative support to service units. This means that the BG is part of an “internal organization”, which has around 500 to 1000 employees supporting a total municipal work force of 13,000 employees.

The IT Department has 20 to 25 employees. It has the responsibility for the city municipality's IT infrastructure. Since 1992, the city municipality has outsourced operational tasks of data and telephone systems to subcontractors. The employees in the IT Department are not involved in technical operations, but act as a unit having formal and strategic responsibilities. Technical support is leased from subcontractors. The IT Department has responsibility for 20,000 user accounts, 3600 desktops, 4000 laptops, and 750 network printers. The IT Department is responsible for the IT infrastructure used by the city municipality's education sector. It is in charge of a telephone system and roughly 250 different software programs. The IT Department is responsible for all changes in programs, including installing of software, upgrades, and implementation. The Communication Department has a different role. Its main task is to oversee that the city municipality's communication and information activities are carried out professionally and correctly, and are service orientated. The staff work mainly on a strategic level, to strengthen work on reputation and credibility, and democracy conditions, and with

enhancing the city municipality's strategies for internal communication. The Communication Department has 10 to 15 employees and updates the city municipality's web site.

The BG was formed in 2008. Today, the BG is a permanent social media competence group. The BG's mandate is to be the municipality's resource group on social media and to serve coworkers. The BG members interact on several social media platforms, have a blog, and test and update themselves on recent developments within social media services. The BG consists of four persons, two males from the IT Department and one male and one female from the Communication Department. The BG has a head, who works in the IT Department. The members working in the IT Department have the positions of "IT consultant" and "training consultant". The two others are "communication advisers". The members are aged in their 30s. They are not trained as computer scientists, but work on the "soft" side of technology. Three have master's degrees in media and communication studies, while the fourth member worked as a teacher before joining the group. The BG is not a full-time assignment. The members spend about 30–50 percent of their work time on it. They meet once a week, when they plan and discuss activities. Another aspect deals with initiating and implementing self-designed activities. In sum, the members are "early adopters" (Rogers, 2003). They are regarded as highly competent localities and have extensive knowledge on social media. They are inspired by the cultural logics of the hacker culture and the open source movement. An overview of the informants' backgrounds is displayed in Table 6.1.

Table 6.1 The BG's current crew.

NO.	GEN	DEP	POS.	EDU	ITLE
1.	M	IT	Leader	Master	Consultant
2.	M	IT	Member	Master	Training Consultant
3.	F	Communication	Member	Master	Adviser
4.	M	Communication	Member	Master	Adviser

6.4 Part IV: The postulate for social media

The BG's work has been communicated through a public blog project. As part of the BG's competence building, they have been transparent about what they do. They have blogged regularly about their activities and their experiences to an ambiguous audience in the Norwegian blogosphere, providing part of the material on which my data analysis is based. Blogging has been a site for reflection and engagement with peers in other public and private organizations. The BG members are semi-professional bloggers and have blogged about once a week since 2009. This blogging has turned into a work routine. The members take turns to write the entries, but have also invited colleagues to write posts as guest bloggers. Their blog has sparked online engagement, as colleagues working internally or externally to the Echo Organization have commented in great detail. The blog entries have addressed a wide range of topics. They primarily deal with the relations between new technologies, work, and organization, involving a high concentration on topics on what it means to work professionally with social media in an organization.

In February 2013, the BG published a post under the heading "The postulate for social media", containing their definition of social media and a set of guidelines for use of social media in a public organization. The entry defined social media as "relation platforms based on user-

generated content”. The entry included recommendations for how employees in the Echo Organization could engage on social media, expressed as a series of questions with answers:

1. *What should you share?* Share with others, what others would share with you. This is a common question from users. Many people are not accustomed to social media and struggle to get over the threshold to share something. A single reply to a post is fine.
2. *How to be relevant?* Listen and learn from those you want to be relevant for. Talk about that which is important for them and for you. Through knowledge of a target group, we can adopt our communications based on what they are passionate about. How do we get insight? Yes, we listen to that one. To be relevant, means to tell someone about a cool event that they should sign up for, even if the conference is held by someone other than your organization.
3. *How to build trust?* Share, participate. Talk to people. Small talk leads to people getting to know each other. When people get to know each other, they build trust in each other.
4. *Who should you present yourself on social media?* Be yourself. Act normal. Be a person. People talk to each other, even on social media. Don’t be a brand, be a person.
5. *What about safety?* Don’t do anything silly. Think twice. There is much that can go wrong when you start using social media. Just as you’re going to say something silly now and then, you will say it on social media. That is part of reality too and in the real world we say silly things. To reduce that risk, it can be wise to make a Risk and Vulnerability Analysis (RVA). It is those who use the social channel who are supposed to do this. Raising awareness of those involved is what you achieve, plus you get to calm down stressed managers and security people to have some measures to reduce the risk and consequences. Some general rules are: Do not post when you are angry, sad, or drunk. Do not do it. Do not make rude and derogatory remarks about people.
6. *How to succeed on social media?* To summarize in a long paragraph: Act normal. Do not be silly, think twice. Share with others what you would like others to share with you. Talk to people. Listen to people. Share with people. Be relevant. Do not just talk about professional stuff (boring). Talk about what you are passionate about and what those who you talk with are passionate about. Be a person. Share an opinion. Say thank you for a compliment. Respond to negative comments. Be objective, but polite. Put a twinkle in your eye when convenient. Be formal when required. Realize that you are going to make mistakes, you’re only human. Be brave. Jump into it.

The definition and guidelines are well written. The definition itself, “relation platforms based on user-generated content”, stands out from other definitions. We can establish similarities and differences. In the academic research literature, Boyd and Ellison’s definition of SNSs has been used as an access point to give meaning to social media, which is defined as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (Boyd & Ellison, 2007:211). The BG’s definition has parallels to Boyd and Ellison’s, as it stresses the importance of social relations. The BG’s definition has similarities to another cited definition, that of Kaplan and Haenlein. They define social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation

and exchange of User Generated Content” (Kaplan & Haenlein, 2010:61). This definition is different from Boyd and Ellison’s, as it stresses features like “Web 2.0” and “user-generated content”. The BG uses the term user-generated content, but identifies that social media is an embedded part of online social networks, as the idea of “relations” surfaces. The BG’s definition is comparable to that introduced by the Norwegian Agency for Public Management and eGovernment (Difi). Difi published a definition of social media as

a way of working and communicating. Online communities and online activities based on user-generated content make it possible to share information, to develop your own and others’ ideas, and to retrieve knowledge in a new way. Social media differs from traditional media, as it is sender controlled, [and] by being more informal and user-governed. It is often described as a mass medium where the distinction between producer and consumer is blurred. (Difi, 2010)

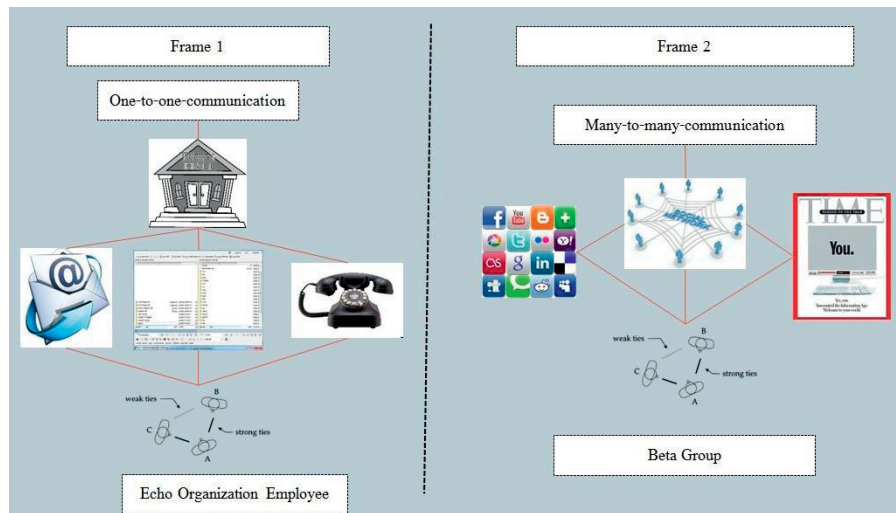
This definition claims that social media can represent a work practice, which enables an employee to interact with resources and be part of an online community of practice. Moreover, social media is defined as different from traditional media, as communicative practices are shaped and scripted by initiatives the users themselves initiate.

The BG’s definition does not stop here, as the BG members have seen it as essential to frame use of social media beyond the mere meaning of only referring to a technical definition. A clearer relation to a practical situation is needed. Therefore, the BG authored ideas for how to use social media in practice, which are expressed in the guidelines. The guidelines are not formalized rules for how an employee is required to engage in social media, but are advice to determine a potential course of action. They are a “roadmap” or guide to communicative practices for how to use social media and can become part of an employee’s work practice. The BG created them for various reasons, like showing employees that they could engage in a pool of valuable resources and that there are ways to connect with colleagues other than just using e-mail. But an important part of the message is to explain that engagement in social media platforms can offer one access to new personal and individual work methods, which have opportunities and advantages. The guidelines are also communicative strategies on how to strategize in an online network and how to manage yourself in front of an unknown audience. They communicate how to present your online self and how far one can go before crossing a boundary for acceptable online behavior, emphasizing that when performing within the range of defined criteria you will be fine. The guidelines present themselves as logical and comply with organizational logics for suitable practices of online behavior.

On the other hand, the guidelines do have an important subtext. The guidelines are normative arguments, advice, and reminders on how the municipality staff can adapt and change their work practices in ways suited to an emerging community of practice. Moreover, they are individualized strategies on how a knowledge worker is required to change his or her work practice, as a consequence of the fact that new network technologies create new communication models, influencing organizational life. This relates to how the presence and distribution of social media in organizations and in society at large may challenge the isolated and established communication practices of the knowledge worker. The knowledge worker will now be confronted with drawing on and interacting across several platforms, contexts, and resources to complete his or her work. This can be better illustrated in changes in the computing and communication paradigms of the Internet, where Internet users are moving from a “one-to-one” to a “many-to-many” communication practice. The one-to-one communication practice is a common way of communicating in many organizations, constituting an assumed *private* and *individualized* Internet computing paradigm. We can call this “frame 1”, which is illustrated in Figure 6.2. In the Echo Organization, many coworkers are assumed to be used to this frame, as

they communicate on e-mail and perform their work in a localized computer file system, where the latter is referred to as “(U:)” by the BG. Many-to-many communication is the new communication practice. This way of communicating can constitute “frame 2”, shown in Figure 6.2. Here, multiple users contribute and receive information where information is interlinked to different websites reflecting how people communicate in the social media universe. The power of the many-to-many communication model is that it can *suspend the artificial boundary* between information and communication tools, meaning that both communication and information become non-private and visible to others. Interacting on social media rewrites social interaction and the work situation of the knowledge worker, which is characterized by knowing less and having a sense of context and an idea of who the receiver might be. To counter it, employees need clearer strategies to safeguard actions and know where and how to negotiate boundaries for proper online conduct.

Figure 6.2 Illustration of new communication models in an organization.



In this sense, the definition of social media and the guidelines are not *arbitrary*. They are the result of extensive research, experimentation, and competence building. The BG’s challenge has been to overcome a “knowledge vacuum”. Moreover, this has expressed itself in the absence of a shared meaning to deal with changes in an external environment and a technology development, where current knowledge cannot give a quick reference to what social media “is”. In a way, the BG experienced a “theory-knowledge-practice-gap”. For example, the members identified that their organization lacked the relevant internal resources. Furthermore, the IT subcontractors they normally use to maintain the Echo Organization’s IT services did not offer them relevant competencies on how to use social media in organizations. In other words, they could not walk into a “social media shopping mall”, buy the tech, and implement it without any further work. This challenges the knowledge on how social media “works” and potentially influences organizational life, as the technology is perceived to be in a constant state of development and precedes the established knowledge on practice.

But if you are confronted with this situation and wish to motivate your colleagues to adopt social media, what do you do? To counter the experience of an “organizational knowledge gap”, you can take the initiative yourself. You can take on the role of creating those particular and missing communicative practices, intended at bringing coworkers together and giving them a

shared community meaning to use social media. But to create it, you need to *learn* about it first, before you can teach others about it. Confronted with this challenge, the BG members embarked on a long-term project of composing a genre repertoire for the use of social media in organizations. This work has consisted of composing an organizational “cultural inventory list”, which persuades colleagues to start using social media and make it part of their work practice. This has meant offering logical arguments for abandoning e-mail communication and storage of work on a local computer file system, and instead to communicate and engage on social media platforms. But this can seldom be accomplished by contending that one should just starting using “it”. Arguments that are more convincing must be scripted. You need to create a genre repertoire or a set of communicative strategies that play on the cultural language that favors and brings out the affordances of the Internet culture, like stressing that networking and sharing of competences can have positive effects on one’s work. But this has to be balanced and comply with the rationality of the municipality’s governing policies.

To show the ways the BG members created their definition of social media and the social media guidelines, the following data analysis examines the process in which they used personal reflection and retrospection on their actions and practices to achieve it. It shows how these were produced, reproduced and modified, as the members interacted with them over time in the organization where they work. This requires us to address the genre repertoire or communicative strategies of social media and the conditions that played a role in creating them. I show the different phases of a structuration process and look at what role the members’ reflection and situation they interacted in played in that regard. I establish a historical approach and examine themes and events that emerged during this period, which means to put focus on the BG’s history, covering the period from the fall of 2008 to the spring of 2012. For each year, I have attributed a theme, which I evaluated to reflect what was important to the members at that time. In 2008, they were discovering and containing the ambiguity of social media. In 2009, the members tested out social media services in the Echo Organization to harvest knowledge in use. A change is evident in 2010 when the BG becomes formalized as a competence group, as new words and expressions are incorporated in how social media is addressed. The theme for 2011 is the members learning to develop strategies for how to use social media fitted for organizational practice, while in 2012 they used the same strategies to educate their colleagues. Spread over the whole time frame, the sum of these actions and activities reflects an extensive knowledge production process. This starts with having an uncertain knowledge of what social media “is”, and continues with gaining a clearer understanding, which has been adapted to the institutional logics of the Echo Organization.¹⁶

Phase 1: 2008 – Discovery and containing ambiguity

To get an understanding of how the BG started, we need to look at the organizing processes from the period when they got their first inspiration. This period is characterized by discovering and containing the *ambiguity* of social media and by relating their personal experiences to changes happening beyond the boundaries of the Echo Organization. From 2004 onwards, many Web 2.0 applications were introduced and had an unexpected popularity. In 2007, the early majority of Norwegian Facebook users registered. Twitter followed in the next few years. Norwegians started connecting, socializing, and communicating with new and old ties. Many Norwegians established an online presence, revealing their full name to an unknown and public audience. Norwegians started to question the meaning of their strong and weak ties and started with online engagement. This public adoption of technology rebounded on organizational life, as it was not uncommon for organizations to install filters blocking use of SNSs, as managers

¹⁶ The strategies I have used to code are outlined in sub-section 2.4 in Chapter 2.

discovered that employees socialized on Facebook during work hours. The BG members noted the novel trend:

- I-1: We started to sense something was happening, a change, in relation to the Internet and what it was used for. New things and services came. Twitter came, Facebook came in 2007, I think it was. We thought “What is this?” and “Is this something we can use in our municipality?” Then we started to have a look around, in the market, or what to call it, of what exists and does not exist of what is now called Web 2.0 services. We didn’t know why we did it. We didn’t know what we were going to do with it. But we felt that there is something here, that we should have a look at it. Could this be useful for our municipality? And, could we use it for something?

The fall of 2008 marks the unofficial creation of the BG. This period is portrayed as like any other normal workday in the Echo Organization’s IT Department, where the group was initiated. There, a small group of colleagues attended their usual business. They worked on strategy documents, attended meetings, and oversaw the municipal IT infrastructure. They replied to e-mails from workmates and filed documents on the local file system, “(U:)”, work practices performed in an open office landscape. Municipal coffee breaks are at 2.00 p.m. with the compulsory cakes on Fridays. Then something happens. There is a *breach* in the communication channels and the communicative practices they use and monitor. Many new network technologies surface. They start addressing them at lunch and at coffee breaks. They begin testing them secretly at work. They are motivated to find out what it “is”, as they find them to be equivocal. They are hard to define and they try to find out more about them, especially how they “work”. Of the current BG crew, only one experienced this period, the current head. He described the period as consisting of lack of clarity, of dissonance, and ambiguity, but also being driven by curiosity. This was reflected in an interview, for example. He looked up his first tweet on Twitter, which said – “what is this stuff?”

Table 6.2 Key words from the fall of 2008.

Period	Key words
Fall of 2008	Other Betas Open Source Project Number Web 2.0 Services Naming of Group Formal Support from Head Network in the IT Department Project Echo Organization 2.0 The Marketing People, the “MBAs”

This initial phase is characterized by attempts to organize and manage the ambiguity of the new network technologies and their communicative practices. The members are convinced that this “novelty” is something the city municipality should pay attention to. They think it is important, but cannot come up with convincing and logical arguments to why the Echo organization should allocate resources to work with it. But they find a loophole. As the chief professional overseers of ICT, it is part of their permanent job description to be up-to-date on new technologies and trends that can have a potential impact on the Echo Organization’s future organizational development. These are often influenced by changes and introduction of new technologies. The city municipality needs to stay updated on potential changes and requires professional

knowledge. The three coworkers introduce a series of strategies to create legitimacy to work professionally with social media and start to build competencies.

This involved getting organized and managing strategies in practice. The BG was no more than a loose informal network of colleagues in the IT Department with an interest in contemporary web culture, consisting of three colleagues: a male and two females. The two females would later leave the BG for new jobs. The group did not formally exist on paper and it had no official name. The future colleagues from the Communication Department had not yet been included in their organizing activities. The BG was an unknown construct.

One of their first actions was to get formal approval from their superiors. The colleagues forwarded a request to their manager, the head of the IT Department. They asked if they could work with the “Web 2.0 phenomenon” and have it as part of their job description. The head gave a positive response, but they could only work with it within the IT Department. This was not enough. Other acts of formalization were required. The cofounders took advantage of a flexible and autonomous work methodology that organizations use to plan, organize, motivate, and control resources, procedures, and protocols to achieve specific goals and complete temporary endeavors – project management. To further their initiative, the BG used project management as a work practice to get organized as a competence group. The BG became a *project*, a temporary *collaborative* enterprise within the IT Department. They got a *project number*, which gave them legitimacy to work with this novel uncertainty. They started to hold regular work meetings once a week, planned future activities and continued researching. They registered on various Web 2.0 applications. They began working on the important strategy document, the *mandate*, a steering document that later would conceive BG’s official role. They contemplated how to overcome counterarguments, on why the Echo Organization should have social media on the agenda. They adopted the term “Web 2.0” into their new name and the BG became officially known as the “Echo Organization 2.0 Project”.

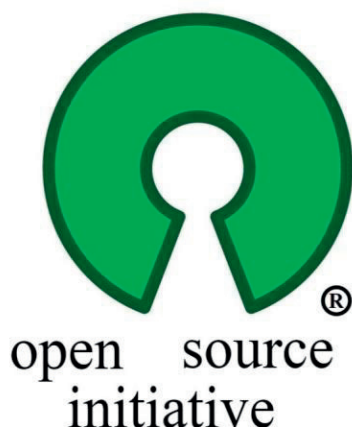
The members organize and manage their strategies in other ways. They look for potential resources, searching internally in the Echo Organization. They make contact with peers, among others their coworkers in the Communication Department. They locate colleagues who work individually with social media and who have integrated it as part of their work practice. They find a historian working at the City Archive, for example, who has by himself created an impressive community of practice, consisting of users with an interest in the history of the city in which the Echo Organization is located. Each week many citizens interested in local history submit old pictures of the city to the historian. The historian has difficulties with authentication and background information on the many submitted pictures. To get help, he digitalizes and publishes them on Flickr. There, certain citizens volunteer to help to authenticate and find facts about the old pictures. Beyond the historian’s control, some citizens take the initiative to write Wikipedia articles, to create accurate stories around the historic pictures. There is an informal learning ecology resulting in research and online publication on the local history of the city they live in. Such persons are invaluable and are given a distinct identity, “*ildsjel*”, a Norwegian term for a local technology enthusiast.

But municipal employees with passion for new technology and interest to integrate social media into work practice realize they are few in numbers. Getting acceptance for social media is difficult. The BG senses the presence of organizational boundaries. To work “internally and upward in the organization hierarchy” to create legitimacy for the BG’s work, proves to be challenging. The BG learns that the Echo Organization seldom allocates resources or adopts new technologies before it perceives that there is an organizational need for it. They sense that

the Echo Organization must first encounter and adopt the technology problem into its activities, before it invests in solving it, instead of being ahead.

The BG members look beyond the external boundaries of the Echo Organization. They find other technology enthusiasts. There are others in similar organizations who work by themselves trying to convince their colleagues and managers that social media is important. They also find an uncharted professional network of web technology professionals. They differ in approaches and professionalism. Some are self-proclaimed semi-tech gurus, while others are credible social media pundits with academic merits. They find that other public organizations have created social media competence groups, who are far more experienced than themselves. There are other betas around, who are referred to as the “big boys”. They become a source of inspiration. The BG studies their work and tries to extract knowledge they can use in their own work. These initial enquiries give clearer focus on what were the BG’s principal sources of inspiration:

- I-1: It was a mixture between Web 2.0 and Open Source. I had worked a little earlier with that in the Echo Organization.



The head of the BG stated that during the onset, the term “social media” rarely surfaced. In reality, the BG conceived that they did not “work with social media”, as they claimed to identify with the values of the Open Source Movement, an online community that dates back to the late 1970s or 80s, which is often referred to as “Open Source”. In short, the Open Source Initiative argues that all computer software should be available to everyone. Moreover, it prides itself on being altruistic, as users are expected to perform community work. In theory, users are granted rights to programs’ functionality and methods, which they are expected to improve without receiving any compensation. Nor can anyone prevent others from using or editing the “code”, which allows anyone to use and make changes to an open source code. Improvements are expected to be

redistributed back to the user community, a practice that ensures transparency of the “code” and that the changes have a record of accomplishments. This openness prevents anyone from establishing ownership over software. This renders a communicative practice stressing the importance of collaboration and openness. The head of the BG referred to himself as a “Linux man” and identified with Open Source. Although he had a master’s thesis in communication studies on the Internet culture, he worked with computer programmers in an IT company who introduced him to Open Source and the operating system Linux, which is claimed to be the end-result of the above community principles. The BG head had Linux on his private computer and used it when he performed with his music band.

During the onset of the BG, the informants explained, engagement on social media had a distinct netiquette. Users engaged under false online identities. Online engagement had its own ambience, as users were friendly. But as new technologies gained popularity, the entry of new actors with different beliefs gave clearer conceptualization that the founders worked with Web 2.0 and Open Source. Moreover, the term “social media” was introduced by someone else:

- I-1: And then there was a sort of change. We went from Web 2.0 to social media. Then people started talking about social media and marketing. Something happened. The marketing people, the MBAs, the consultants.

The entry of the so-called “MBAs” marks a significant community breach. Social media is now given a marketing label and is introduced by professionals who adopt Web 2.0 services with other intentions. The newcomers use social media as a place to promote themselves and see it as a business enterprise. In short, they are driven by an economic imperative – to make money – and are not on social media to share knowledge for free, as was the case in the Open Source community.

It is during this phase that the members get a clearer technological framing of work practice, a property giving perception on what types of communication models they are working with. The BG members see that coworkers organize their work practice around e-mail, phone calls, meetings and the localized computer file system, “(U:)”. This represents the closed and protected way of working, *private*, *individual*, and *one-to-one* based, happening within the realms of separate workgroups and departments, where coworkers only talk to each other and the people they know well. This work practice symbolizes working within the “IT silo”, a term used to show how communication in computer systems can uphold rigid barriers between departments in organizations. Web 2.0 and Open Source represent another approach to reduce internal barriers. Communicating and using blogs, wikis, SNSs, and tagging are characterized by a *many-to-many* communication practice, where multiple users contribute and receive information. The BG members believe this has benefits. Information retrieved from different websites, reflecting how one engages in online communities. The many-to-many communication model can *suspend the artificial boundary* between information, tools, and people, a factor that can bring down the IT silo and the internal boundaries between departments in the Echo Organization. Web 2.0 and Open Source can therefore enhance collaboration. To work and connect in online networks can increase the flow of internal communication. This means challenging the linear and institutionalized ways that organize work practices in the Echo Organization. The BG members imagine that Web 2.0 represents a way to potential new resources. The BG decides to set out to explore and harvest experiences on how aspects of the participatory culture of the Internet can work in an organizational context.

Phase 2: 2009 – Testing of ties and Web 2.0 applications

Table 6.3 Key words from 2009.

Period	Key words
2009	WordPress, Yammer, Elgg, Twitter, Laconica, Identica, The Wire, Origo, Wikispaces, SlideShare, Flickr, Plugins, Tagging, VirtualBox, Chrome OS, Facebook, “Hey wiki wiki, wiki you are alright”, “Facebook at work”, 😊, “YouTube for presentation”, “Small-talking”, “Noise”, Security, Cloud, Licences, Open Source, Non-commercial, Sandbox

A change can be observed in 2009. The BG members start to conceptualize and modify their understanding of social media, as they examine its ambiguity by practical and systematic testing. 2009 is the *technical* year of testing Web 2.0 applications. The BG works systemically across the external and internal boundaries of the Echo Organization. The BG announces their official online existence to the social media universe, as they now are the administrators of the Echo Organization’s official Twitter and Facebook accounts. They create an official blog,

which is published in March 2009. The blog tells the story of a great variety of completed activities. We can read about how they invite colleagues to blog about their work experiences and the challenges with meeting the Internet era. The blog generates interest, as colleagues within and beyond the Echo Organization respond to posts. The BG members share, network, and adopt or reject a myriad of Web 2.0 applications. More than 20 different social media services are mentioned on the blog in 2009. Some are analyzed and tested in great depth, while for others they only scratch the surface. The members start sharing their experiences, like posting their presentations from workshops, seminars, and conferences where they have been invited as guest speakers. They scrutinize what others do, accessing how their peers work in other municipalities and government agencies. The BG members consider whether they are “in front” or “behind” current developments.

These activities mean engaging with the complexities of the contemporary Internet culture. Moreover, it is an exploration of how to adopt the participatory digital culture to an organizational context, which normally has been framed against society at large. This engagement powers a production and introduction of inadvertent or deliberate communicative practices, which is driven by a selection and creation process giving the genre repertoire a more concrete form. This is based on an ongoing interpretation of the situation that the BG members encounter, entailing that social media perhaps attains a more scripted form. This is epitomized by how the BG members start labeling the social media applications they test and evaluate. They give social media services new meanings and they attempt to sensemake how the new technology is compatible or non-compatible with the organization in which they work. This creates many sub-themes, but some stand out over others.

Technical and practical assessment is the most important theme, which is proactive and motivated by personal curiosity. The BG members test out freemium web services offered by Internet companies and open source software. This means registering with different Web 2.0 services and taking on an explorative role as early adopters. They devote much time to analyzing different SNSs, like Elgg, Twitter, Yammer, Laconica, Identica, the Wire, and Origo. Different SNSs have different features, which they assess and try to get their heads around. The members try to find out how they “work”. And from these initiatives, they establish which SNSs match the needs of the Echo Organization. Much of involves figuring out to what extent they should adopt the professional SNS Yammer over the open source Elgg, as the Echo Organization’s new internal SNS. The BG members have divided opinions. Yammer is not open source and will cost the Echo Organization, as Yammer makes its revenues from the licenses per user they charge clients. Moreover, evaluations from other organizations show that employees use Yammer more to chat one-to-one than participating in a community dialogue. The BG members classify Yammer as a crossover between Twitter and Facebook. But Yammer will later be adopted to become the Echo Organization’s internal SNS. Elgg, on the other hand, is considered to be open source and aligns with the BG’s values. But the BG members explore certain distinct social media features like tagging. They establish that tagging provides certain possibilities on sharing knowledge. The content management system WordPress receives rigorous treatment and is tested on their colleagues, the Echo Organization’s ICT supervisors. Wikispaces gets the same treatment, as it is tested and used among their coworkers, during a workshop in the IT Department. They establish that it can be applied for collaboration and to co-write documents.

The flipside to testing is acquisition and reinventing of Internet terminology and cultural expressions. It is common that the social media universe is full of particular slang languages and cultural expressions, which can be impermeable to neophytes. This Internet terminology comes as the direct result of people’s use and interaction in online communities. This

terminology can represent a genre repertoire and is an instrument to create a sense of shared community feeling. There are seldom any standardized definitions of social media languages, due to constant changes in the social media universe and culture. It is not uncommon for new terms to emerge simply for the purpose of saving keystrokes, to write economically or from misspelling. This causes the creation of abbreviations, symbols, and acronyms, which combine keyboard symbols and language. New dialects of Internet slang like *leet* or *Lolspeak* developed into communicative practices in this way. The BG plays on this aspect, but adjusts this to be translated within moral and cultural boundaries acceptable to the Echo Organization's goals and activities. The BG members use an informal language, which symbolically acts as a divergence from the formal vernacular commonly practiced in the Echo Organization. The BG's communicative practices are direct and seldom appear as ambiguous on social media. They use emoticons and play on the comicality of the Internet culture. Another communicative strategy is the persistent reframing of social media. SlideShare is "YouTube for presentations" and Elgg is "Facebook at work", for example. But the BG members demonstrate that they can play on the formal phonological apparatus of the post-modern bureaucracy. They author a series of manuals, a type of "official municipal textbook" aimed at their coworkers, which evaluate and explain how Web 2.0 services function.



As an extension of this, the practical testing leads to a clearer perception of the ongoing negotiation of organizational boundaries between social media services and the Echo Organization. Many blog posts deal with this matter. Much of this contends with questioning how social media can be adopted and used by employees, without contradicting institutional guidelines in the Echo Organization. This is

driven forward by asking a range of inductive questions, which are simple to ask but harder to answer. The BG members especially ask how the new participative technology can be adopted to the linearity of older technologies used in the Echo Organization. There are quality issues of particular SNSs that grab their attention. Certain SNSs, for example, can be used for internal communication, while others cannot. Facebook and Twitter are too transparent, as they would never fit the requirements of the Echo Organization's standards for information safety and storage. Elgg and Yammer are congruent on that matter. Other questions center around how to get 13,000 employees to use social media and to feel belonging to a public organization called "*kommune*",¹⁷ how to promote and enhance a better working environment among colleagues, how to reduce internal boundaries between departments, and how to present oneself in the online world.

Creating a sandbox and the testing of Elgg

The other side to testing and reviewing of technologies, however, brings up more serious and complex organizational questions on institutional adoption and implementation of social media into organizations. The BG reviewing social media on their blogs is one thing, but addressing the actual organizational challenges of having a live and vibrant online community is another. There is a lack of real "hands-on" and trustworthy experiences of what it really involves to have a sustainable SNS in an organization. They experience that coming across research and user experiences on the effects of using Enterprise 2.0 in organizations is lacking. The BG can *read*

¹⁷ Norwegian for "municipality", governing and administrative body of local government.

about successful case stories, recipes, and templates, telling the stories of how online communities emerge and unite users, but these appear to be camouflaged and motivated by appealing to the mystical wonders of technology, rather than addressing the real social challenges in getting users to change their work practices and adopt new technologies. There is too much sales and management literature offering simple solutions to complex organizational challenges. Moreover, there is a lack of empirical evidence on what “works” and what “doesn’t work”. The members find that serious research, which could tell them about the genuine implications of implementing such technologies in an organizational setting, is hard to come by. Academic research is seen to be behind. There is seldom any licensed manual or textbook telling them “how to do it in practice”. This experience constitutes a challenge. Consequently, the BG members take the initiative and improvise. They create their own practical social media test site and embark on the bold assignment of implementing and experimenting with the open source SNS Elgg in the Echo Organization by themselves.

This initiative is an undertaking that will reshape the BG in a number of ways. The testing of Elgg will be used to communicate their competences (what they do); their understanding of the social media universe; what it involves to work and communicate many-to-many in an online community in an organizational context, etc. But the most crucial lesson is how the members will learn and get first-hand experience to frame their wider understanding of *relation platforms*. The testing of Elgg will influence the group’s identity too. The BG appropriates the industrial term “beta” into their group name and they start using that instead of the previous one, the “Echo Organization 2.0 Project”. The use of “beta” is not random, as it is an adaptation of beta testing. In the ICT industry, hardware and computer software go through testing regimes, called beta, a strategy used to check new technologies before they are introduced into the market. Beta follows after the alpha phase, the development stage of computer software. This testing has benefits. It gives an overview and one can acquire input on whether the technology meets the desired quality requirements. The BG reframes and adds another meaning to this phase, as the members realize that they are working with web technologies that are constantly under development. This makes social media different from computer software, being always in a constant state of development:

- I-1: That was the beta idea, try it out, get it out, it’s not finished. It doesn’t end in a final version. It will always change. That’s the idea. It’s a way from going to the computer store and picking it from a shelf, when I think about it. Buying it in a store, installing it, and using it. And then there’s that. And then there is an update in five years or something like that. A new version comes. The Google version of e-mail, g-mail, had hardly any features to send something with, when it first came. And then you get more and more features and adjustments, taking away things. They change it all the time. Gmail was in beta a long time. I think it was another beta who launched it, “forever in beta”. Things are never complete. Facebook changes all the time.

Such reflections are crucial and bring insights, as it becomes clearer what distinguishes social media services from computer software. Furthermore, they learn what separates the business models of Internet companies from traditional IT companies, setting premises for conditions of use in organizations. IT companies have a rather different business model, as it is not uncommon for public administrations and companies to procure computer hardware and software in the form of licenses or buy the hardware themselves. Acquiring such ICT material demands strategic thinking, pre-planning processes, and coordination of complex implementation processes, because such procurements represent significant investments for any organization. The computer hardware and software are ready-made, require installation, login, and training of users, which also have to be tested and validated. Organizations have somehow

to be modeled after what is the available standardized computer hardware and software on the market, following an *industrial* production approach or model. Internet companies offering social media services are organized and offer products according to a different logic, following a free and freemium business model, but are also more prone to adjust to an industrial *network* logic or model. Social media services are presented as “free” and technical features are updated based on the interaction from users and assumed future needs and trends. And as users are *directly* connected to a cloud solution and interact with a user interface that changes quickly, this marks a difference and is perhaps the strength of the social media services offered by Internet companies. For any end-user and organization there are other premises setting conditions for use. If using this solution, participation is characterized by low threshold, only requiring personal registration and creation of a user profile. Users can build and organize personal online network and create content. But it requires that users are self-organized and you have to undertake a personal training regime, to learn the social media technology. For organizations, the potential large procurement of licenses can drop. You do not need to deal with subcontractors directly, as payment solutions are automated and the software does not need to be installed directly on your computer. The disadvantage, alternatively, is that you are now more dependent on having competent end-users, who can access and validate the qualities of the social media services.

And *this* is what the BG members learned. The Echo Organization has established and formal procedures for procuring IT services from its subcontractors. As pointed out earlier, the Echo Organization’s technical and operational assignments are *outsourced* to IT subcontractors, which means that the organization becomes dependent on the products and competences they offer. In the beginning, the BG investigated whether their subcontractors were updated and had formal competence in social media like Twitter, Facebook, wiki, and blogs. But the BG discovered that very few of its IT subcontractors were in the social media market:

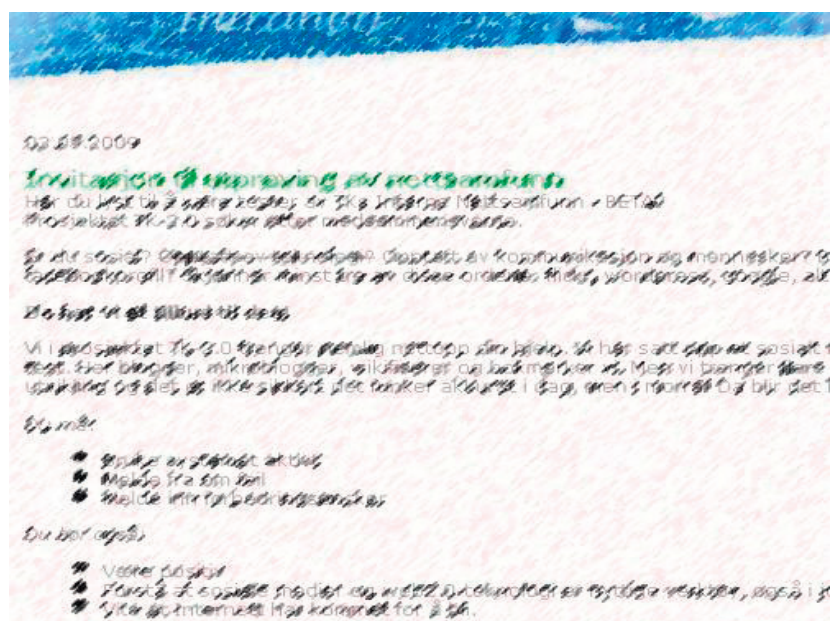
- I-1: We did that in the beginning. We went outside the standardized processes. We have IT subcontractors that operate all the software for us. We have outsourced that. But we found out that we had to do it by ourselves. The large IT suppliers in the market were not there at all. They sell large packages and big software programs.

This surprise shapes the professional identity and practices of the BG in a new way. The BG has to take a new direction and embrace the leading organizing logics of the social media universe, recognizing that social media is largely user-driven. The members take on the role of super-users and start harvesting experiences from self-organized testing. They create their own test site within the ranks of the Echo Organization, which they call a *sandbox* or *playground*, which is later used to symbolize what the BG does in practice to acquire knowledge on social media. The terms refer to a testing environment where software developers isolate untested code and experiment with web applications. These are metaphors used about revision control where software developers check out a copy of a source code to find potential flaws. As the BG is projected to be performing this, it involves taking a proactive approach and becoming the department conducting revision control. By taking on that part, the BG members discover additional technical and organizational barriers. None of them are trained computer scientists, as they are analytical specialists on strategy and technology management and organizational matters. They realize that they lack the necessary technical skills to operate social media services. Moreover, there are few available technical experts around, who can instruct them on how the social media “works”. They can call or set up meetings with their IT subcontractors, but there are few “social media help desks” for them to call if they encounter malfunctions with social media. That is the cost of adopting social media into an organization. On the other hand,

the BG is compelled to become auto-didactic and gain knowledge by informal learning, to fill a knowledge gap in the Echo Organization.

The actual technical organization and practical testing of Elgg in the Echo Organization, however, is a large logistical undertaking by the BG. Elgg is an open educational SNS, providing individuals and organizations with the components needed to create an online social environment. Elgg has many technical features the BG evaluates as relevant to meet the needs of the Echo Organization. Elgg includes features like blogging, microblogging, file sharing, and the possibility to create groups. The choice is somewhat random, although Elgg is open source. The BG's head explained that there are many coincidences involved in why they chose Elgg. Coworkers read about and recommended it, so that it is difficult to pinpoint why one service is chosen over another. Elgg is regarded as a milestone, allowing the BG members to acquire first-hand experience of an SNS in an organizational setting. The testing was divided into two phases, one that took place within the ranks of the IT Department, while the other included larger parts of the Echo Organization. This move involved expanding their activities beyond departmental borders, to include new members in the Communication Department and coworkers who shared an interest in use of the web culture, who were *ildsjelene* – technology enthusiasts. The first testing phase took place during the first half of 2009, and the second within the second half of the same year.

Figure 6.3 Advertisement where the BG recruit users to test Elgg.



During the first testing phase, the BG members compared Elgg with a familiar SNS, Facebook. Elgg was technologically reframed as “Facebook at work” or “our internal Facebook”, viewed as a means to enhance the flows of internal communication in the Echo Organization. The BG set up all the technical installations themselves. They acquired a web host and installed Elgg on it. There was a lot of technical work to get it to “work”, which was difficult due to the fact that none of them had technical training in computer science. This means that they had to learn Elgg from scratch. They struggled with getting Elgg technically configured at first. Afterwards, a small group of colleagues from the IT and Communication departments in addition to specific

colleagues from other parts of the Echo Organization were invited to test Elgg. The test subjects evaluated Elgg's features and many were concerned with finding out how it "works". Elgg has many positive features. It allows users to create groups and personal user profiles where they can publish information on competence and interests. Elgg is viewed as compatible with the Echo Organization's IT standards. It "looks good", is transparent, can have many users, and can enable a vibrant online community.

The second phase was ambitious, involving upscaling the testing of Elgg. The BG wanted to test it on a larger audience of test subjects, so they made an announcement and recruited a group of early adopters:

- I-1: We made a story about it and published it on our intranet. We said that we were testing an internal Social Network Site, a kind of "Facebook at work". We asked if anyone was interested in getting involved and having their say. We stressed that the testing was in beta. We wanted 20 test subjects or so to start with it and got on with it. They were people from different parts of the organization.

This upscaled testing generated different experiences than during the first test period. Although the test subjects evaluated Elgg's user interface and functionalities positively and found it worked properly, bringing another part of the Echo Organization's digital tribe into the BG's sandbox proved to be a mixed experience:

- I-1: We noticed very quickly that getting 20 different persons from the entire Echo Organization together was not the best move. Different people from different areas worked with different things, so it became very apparent that people from the City Archive were talking about things that were not relevant to those working at the Education Department. It would have been much smarter to bring together people to work jointly on a project or people working within in the same department, who had something in common.

The BG acquired several "learning outcomes" from this test phase. They learned that the super-users had different motivations in using Elgg. The members discovered that the test subjects were motivated and took interest in Elgg, because they had one thing in common, *new technologies*. Their participation was seldom motivated by the fact that Elgg could be used to exchange *professional experience* on an ongoing project or swap personal competence, for example, but by a shared passion for new technologies. The test-users bonded and bridged with ties over an *interest* in a new technology, rather than linking with a new tie for other professional reasons. This meant that the BG members understood that online engagement was not motivated by sharing a common ground for working in the same organization. Instead, the testing of Elgg against a heterophilic online environment brought the organizational *boundaries* of the Echo Organization to the forefront. These manifested around certain key words, introduced by the test subjects who did not share a passion for new technologies and who later dropped out. The "Elgg quitters" argued that Elgg was "*not relevant*" and represented a "*distortion*". These key words had great learning value, as they gave a clearer measurement on how to activate and include reluctant non-users to become active users of social media. Arguments for non-participation can be manipulated and turned around. Why not argue that new users have to find what is *relevant* to them, implying that "rejection arguments" created by SNS quitters can be turned around to something positive.

The testing of Elgg was therefore not in vain. Passion for new technologies was not the most important finding, but the meaning and value of *social relations* or *ties* embedded in network technologies was. The ambiguous nature of social media became clearer, as it could be used as an instrument to deal with organizational challenges and reduce departmental boundaries. The BG members now realized that SNS could be applied as a tool to get coworkers with *dissimilar* professional backgrounds to congregate and connect with each other, for example. To work on that level required a different approach. The BG had to become organizational advocates to make the case that there are distinct benefits in strong or weak ties, performing connecting strategies, and having an active social network, which are advantageous foremost to those who participate and organize themselves in them. Social networks can have particular affordances, which non-users seldom think of at first, such as giving access to a pool of resources. Non-users do not connect social media as a type of positive resource, implying that the BG members had to labor logical and rational arguments that stressed the positive value of bonding with colleagues, either informally or formally. The BG had to adjust their genre repertoire from the *technological* in favor of *cultural metaphors*, arguing that social media is a venue that can facilitate the building and expanding of social networks to uncover informal sides and resources in a public organization. Moreover, these can be attained by embracing and engaging in the participatory digital culture of the Internet.

Phase 3: 2010 – Dealing with formalization

Table 6.4 Key words in 2010.

Period	Key words
2010	Google Wave, Todo Wikia, Yahoo Pipes, Simple Pie, Yammer, Netvibes, Google Reader, Google Desktop, RSS Feed, Goal thinking, Target Group, Representation online, Guidelines Mandate, Guidelines Permanent Group, “Us” and “Them”, The organizing of work with social media

The year 2010 marks a change of direction. The BG members now use personal reflection and retrospection on their actions and practices to conceptualize social media in a different way. They produce and modify their understanding, as the members start to examine this against a formidable internal adversary, the dominating and institutional scripts, logics, and practices of the Echo Organization; 2010 marks the *formalization* phase in the BG’s history. This means engaging directly with the organizational logics and formalities of the apparatuses of a post-modern bureaucracy. The Echo Organization has many ways to express its formalities, foremost by being a third legal person with the same rights and responsibilities as a physical person, but also by enacting and staging a wide range of rituals, symbols, and use of a legal and impersonal language rendering the rationalities and governing logics of how contemporary public organizations are organized and managed. The BG’s negotiative engagement with this formal apparatus is reflected in two activities the BG members undertake: the authoring of the Echo Organization’s official *guidelines* for use of social media and the “*mandate*”, the strategy document that establishes the BG as a permanent social media competence group.

Nevertheless, the BG continues working with some of the same themes as in the previous year. The BG members still engage in a variety of activities. They still explore and evaluate the great range of social media applications on the Internet market. On the BG’s blog, we read about Google Wave, Todo Wiki, Yahoo Pipes, Simple Pie, Yammer, Netvibes, Google Reader, Google Desktop, RSS Feed, implying that the BG members are interested in the range of web services offered by Google. But some social media applications are assessed more thoroughly

than others. 2010 is the year of the blogosphere and the freemium SNS Yammer. During spring, the BG members make a head count of how many elected politicians in the Echo Organization have a professional blog. They conclude that many elected politicians are active bloggers. The BG members install official blogs for the city municipality's Executive Directors and urge them to participate in the blogosphere. The BG experiments with Yammer, which the members affiliated to the Communication Department test on their colleagues in the department. The use of terminology changes; the post-modern bureaucracy's formal language embeds into the informal Internet slang that has been the BG's trademark so far. Blog posts contain words and expressions like "guidelines", "target groups", "success stories", "strategy", "citizens" etc.

The city municipality's internal organizational boundaries are utterly sensed, which establish themselves in the wake of the activities the BG members carry out. The BG members start travelling around in the city municipality, visiting departments and units who have invited them. They explain to their colleagues what they do and how to use social media. The BG is now a valued resource and they publish their presentations on SlideShare. The testing of Yammer, on the other hand, is perhaps a case illustrating the challenges in creating internal transparency in a public administration where departmental autonomy is assumed to be heavily guarded. Yammer soon emerges to become the Echo Organization's internal SNS, but the BG registers experiences as seen in the Elgg case. Colleagues ask many critical questions, which are very hard to answer. What content should be shared? What is spam? Why should one share? And how do you filter out "relevant" from "non-relevant" information? The main challenge is to overcome the firm skepticism from coworkers on why it is important to engage on social media. Coworkers are assumed to be afraid to "make errors" on social media, which can backfire on them. Engagement in social media is therefore associated with risk. To counter that, the BG members find out, many colleagues exercise self-censorship and only participate in closed digital spaces where trust can be exercised. On Yammer, for example, the BG members observe that coworkers create closed online groups where they only communicate with colleagues from their own department.

Authoring the municipality's guidelines for use of social media

An essential part of the communicative practices constituting the genre repertoire is the Echo Organization's official guidelines for use of social media for employees. Guidelines are common in organizations and are statements aimed at determining a course of action. Guidelines are intended to streamline particular processes to set standards for how routines or practices can be carried out, but they are seldom mandatory, binding, and enforced. Guidelines are issued to make the actions of an organization's employees predictable. The Echo Organization's guideline for use of social media follows the same path. The guidelines are not rules, but suggested strategies or instructions for how employees can interact and present themselves on social media, a type of "common-sense web etiquette" on how to be individually mindful and responsible when representing a public administration. They explain how the city municipality's employees can avoid risks and deal with unpleasant situations. They are strategies on how to engage in a public sphere, but also reflect how a post-modern organization or bureaucracy attempts to streamline and approve the use of social media, reflecting that such organizations have the symbolic capacity to follow trends and adopt them into their apparatus. But there is a background to all of this. Official guidelines seldom emerge from a vacuum, but are embedded and spring out of an internal and external context in which an organization interacts or is an embedded part of. As a written piece of text, they have to be authored by an organization's member, a task that was carried out by the BG.

For the BG members, this constituted a contradiction. For more than a year, they had engaged on Facebook, and Twitter, and blogged about their work, without having any official guidelines to direct them. And there was a good reason for that; the Echo Organization did not have any on record at that time. The BG members had engaged with and represented the city municipal internally and externally, but had never breached any formal rules putting the Echo Organization in any potentially problematic situation. But as guidelines did not exist on paper, they were required to be labored into existence, which involved organizing a work process headed by the BG members. This started in spring and ended in the fall of 2010:

- I-1: We were two from the Beta Group and an advisor from the Communication Department. The latter person was a contrast to me, an older lady, not so very interested in social media. We had a nice little group going. And we started to look into it. We went online and checked out how other organizations had worked, what kind of guidelines they had. And we started sewing it together. And we looked at how this could be fitted into the Echo Organization. Our guidelines proved to be very similar to others.
- R: Are there any differences?
- I-1: There are many similarities. You can see that if you compare them, even between corporations and municipalities. Many state the message, “be conscious of your role”, “consider if you as an employee should have contact with clients and single individuals”. They address issues around creating individual awareness on which and what organization you work for. Many guidelines try to have a “think twice” message embedded into them.

The BG looked to various organizations for inspiration like municipalities, state-owned companies, and corporations, illustrating how actors in organizations look to their equals in other organizations, reflecting a process on how ideas are tacitly imported and appropriated into organizations. The BG went to the corporate sphere and found inspiration from a mobile phone operator, which was seen to have created suitable guidelines. The authoring of the guidelines was part of a work process. The BG members presented various drafts to managers from different departments in the Echo Organization who gave feedback, but also used the same logic to an external audience. The BG published various drafts of the guidelines on their blog and wanted feedback from peers, implying several adjustments to what became the final version. The first versions were published on the BG’s blog in May, while the second and revised versions were posted in November 2010.

The first draft of the guidelines generated a discussion thread with more than 20 comments on the BG’s blog. The BG’s peers suggested the need to clarify the drafted guidelines, but also gave pointers about other organizations working on the same matter. The guidelines themselves give practical advice to municipal employees on how to administer and interact on social media platforms. The guidelines communicate the same overall message, but the BG created two overlapping sets. These are framed according to what extent a municipal employee represents and acts as the formal professional identity and voice of the Echo Organization on a social media platform. One set of guidelines instructs clearly how a municipal employee should administer and perform on a social media account *that officially represents the city municipality*. A separate set of guidelines instructs how an employee should interact and present him- or herself *on social media in general*. This means that there is a defined difference in individualized and separate role performance and streamlining of responsibilities between representing the Echo Organization as a *whole* and as an *individual employee*, when participating on social media applications as a city municipal employee.

The first draft of the former set guidelines, which instructed how an employee should administer and perform on a social media account that *officially represented the city municipality*, stated that an employee should:

1. *Be present. Participate in debates. Remember that you represent the municipality.*
2. *Always reply to factual errors or questions on municipal services and facilities.*
3. *Answer positive comments, say thanks :-).*
4. *It is not necessary to answer neutral comments, but it is ok to do so.*
5. *Try to respond to negative comments.*
6. *Adapt answers based on the sender's position, form and content. Professional? Humorous? Formal?*
7. *On the general questions, answer as Echo Organization, without name / title.*
8. *When answering professional questions, use your full name and title (e.g. unit leader and unit).*
9. *If a question requires processing / archiving, the submitter must be notified that it has sent to be a formal request.*
10. *Political inquiries have to be answered on a political level.*

The first draft of the second set of guidelines, which described how an employee should interact and present himself or herself *on social media in general*, stated that an employee should:

1. *Be active in professional discussions. In the Echo Organization, we are Open, Competent and Courageous.*
2. *Interact in the same way, as you would otherwise have done. Use common sense.*
3. *Be aware of your role as an employee of the Echo Organization.*
4. *Consider whether you should have contact with students / users / dependents in social media like Facebook or MSN. If so, think about how you act.*
5. *Employees have freedom of speech, but confidentiality also applies to social media.*
6. *Be open about how you work.*
7. *Be clear that you express yourself as an individual and not on behalf of the Echo Organization.*
8. *Enquiries aimed directly at the Echo Organization are answered by administrators of the accounts themselves.*
9. *Remember that the Internet is permanent; it can be difficult to erase what you have said.*
10. *If in doubt, send an email to: echo@organization.com*

We can make further interpretations of the guidelines. The first draft of the guidelines reflects a value system, which is common in many contemporary organizations. We learn that when a municipal employee interacts in the social media universe, he or she is a public envoy of that particular value system. This has to be safeguarded in the public sphere. The Echo Organization has rights, duties, and responsibilities towards its citizens, which are streamlined and recalled in how an employee should interact on social media. Administering and performing on a social media platform appropriated to represent the Echo Organization suggests different and clear courses of action. This difference is notable as administering official municipal accounts has to be managed more directly, which deals with following a distinct procedure of normative actions of “dos and don’ts” that can be used to cope with online traffic. Managing official social media accounts therefore involves a distinct role performance, which appears to be approached in the same manner as a public organization approaches requests from the constituency it serves – it should be processed by a formal tone and applying its apparatus. The guidelines contain several *direct* communicative strategies on how to respond to inquirers and interact with an online community by being always *present*. We find communicative strategies for how to deal with the challenging sides of contemporary web culture, like approaching Internet trolls and humor.

Employees are advised to reply to official requests and do so by answering factually and by being positive. We see also that you are suggested to answer with the name of the municipality, not by personal signature of the employee. The guidelines are a reminder that official municipal accounts are politically neutral and not a site for expressing private political opinions of a municipal employee.

The set of guidelines that instructs how an employee should interact and present him- or herself on social media *in general* has as different focus. These are not thematically concentrated on how to directly manage and organize online traffic on an official social platform representing the Echo Organization, but more an encouragement to employees to remember in the management of their professional online identity that they are acting on behalf of a public organization. The streamlining of the potential course of online action is therefore different. In a sense, they render hints on governing the *presence* of your professional online Self. The guidelines suggest a range of communicative strategies on how an employee should organize, manage, and present his or her online professional identity. This involves an encouragement to embrace the Internet's participatory culture, but is also a reminder that employees have a defined responsibility on knowing the boundaries and limitation of their actions. The guidelines encourage employees to use social media and remind them of the Echo Organization's values and culture, to be aware of whom one establish relationships with, that one's viewpoints are not that of the organization but one's own, and that there are risks to interacting and sharing on social media.

In a blog post published in November 2010, the guidelines were modified. The two sets of guidelines are still there, but the second draft of the first guidelines, which instruct how an employee should administer and perform on a social media account that officially represented the city municipality, was changed to:

1. *Be present. Participate in debates. Remember to always represent the municipality.*
 - *Department managers are responsible for the operation of official unit accounts and the Communication Department is to be notified on what accounts are created.*
 - *Answer questions and comments.*
 - *Say thanks for compliments.*
 - *Reply also on neutral comments (which are addressed to the municipality).*
 - *Always reply to negative comments, but consider how long you want the dialogue to go.*
2. *Always point out the factual.*
3. *Overall requests, you sign with your name (first name only).*
4. *Adapt the content of the response according to the inquiry's form and content. Professional? Humorous? Formal? Be careful with irony and sarcasm.*
5. *Questions requiring formal processing, the submitter must be noted that it has been sent a formal request.*
6. *Be aware of the distinction between administrative and political levels*
 - *Refer only to the Municipal Director on cases.*
 - *Do not give your own assessment of matters of political consideration.*
7. *During emergency situations when the Municipal Director has its crisis team, all communication goes through the Communication Department.*

The second draft of the second set of guidelines, which described how an employee should interact and present him- or herself on social media in general, stated that an employee should:

1. *Be aware of your role as employee in the Echo Organization.*
2. *Be active in professional discussions, be open about where you work and when it is relevant.*
3. *Consider carefully whether you as a private individual should have contact with students / users / dependents or subcontractors on social media. Even if you initially think it's okay to distinguish between the roles, this can over time lead to situations that can be experienced as problematic for both parties.*
4. *Employees have freedom of speech, but confidentiality applies to social media.*
5. *Assure yourself that you do not express yourself on behalf of the Echo Organization, if it questions your role.*
6. *Enquiries aimed directly at the Echo Organization are answered by the administrators of the accounts.*
7. *Remember that the Internet is permanent, it can be difficult to erase what you have said.*

In the second draft of the guidelines, we find small variations, when compared with points outlined in the first sets published in May. The most significant modification includes new details about what types of actions and instructions employees should perform, when administering and organizing social media accounts representing the Echo Organization. This is visible as the BG has added small details about the Echo Organization's official organization chart and management structure, which means that the city municipality's formalities and the language of the post-modern bureaucracy are now more embedded in the social media guidelines. The managing of an official account is now a defined organizational responsibility, allocated to middle managers of the department to which an account relates. Moreover, the guidelines contain a requirement that creation of any new official social media account has to be reported to the Communication Department. We can discern that the same principle applies when administrators of official social media accounts representing the Echo Organization get requests on political and administrative matters from their citizens. Any citizen request evaluated as political has to be referred to and processed by the Echo Organization's Municipal Director. We can note that the BG has attached a particular detail on actions when there is a crisis or emergency situation. In such cases, all official social media accounts are to be closed down and all outgoing and incoming external communications are to be delegated to the Communication Department. We can detect that the second set of guidelines, which concerns how an employee in general should interact and present him or herself on social media, have omitted certain small details. The BG has deleted details about references to distinct social media platforms. Facebook and MSN are not mentioned, for example, which also applies to the abandoning of the Echo Organization's corporate values.

Taken all together, we can make a simple comparison between the first and second drafts and the final revised version published in January 2013, which the BG called the "Postulates of social media". This is illustrated in Table 6.5. This shows a development in how the BG has simplified the guidelines. The BG's "Postulates of social media" has a focus on emphasizing important key words, which are concentrated around six themes. Instead of having a clear focus on communicating the formal face of the Echo Organization's apparatus, the BG aimed at casting light on the performance of communicative strategies fitted to engage with the Internet's participatory culture, moreover, to have distinct "driving rules" that motivate employees to engage with peers rather than reporting their recent activities to a middle-manager. This means paying attention to specific details, like what digital content you should share; how you should consider your postings to be relevant; that creating trust is essential to the social media universe; that you should give careful thought to how to present yourself in the digital world; that safety and risk in the Web 2.0 domain is about "not doing anything silly"; and that the easiest way to succeed on social media is to act as a "normal" individual.

Table 6.5 Modifications of guidelines to postulates of social media.

Modification of guidelines to postulates for interacting on social media		
Draft Guidelines May 2010	Draft Guidelines November 2010	Postulates of 2013
- Be active in professional discussions. In the Echo Organization, we are <i>Open, Competent and Courageous</i>. - Be open about how you work. - Enquiries aimed directly at the Echo Organization are answered by administrators at the different accounts	- Be active in professional discussions, be open about where you work and when it is relevant - Ensure that you do not express yourself on behalf of the Echo Organization, if it is questions on your role - Enquiries aimed directly at the Echo Organization are answered by administrators of the different accounts	<i>What should you share? Share with others, what you would like others to share with you</i>
Be open about how you work.	Be active in professional discussions, be open about where you work and when it is relevant	<i>How to be relevant? - Listen to and learn from those you want to be relevant for</i>
- Be aware of your role as an employee of the Echo Organization - Consider whether you should have contact with students / users / dependents in social media like Facebook or MSN. If so, think about how you act. - Be clear that you express yourself as an individual and not on behalf of the Echo Organization. - Remember that the Internet is permanent, it can be difficult to erase what you have said	- Be aware of your role as an employee in the Echo Organization - Consider carefully whether you as a private individual should have contact with students / users / dependents or subcontractors on social media. Even if you initially think it's okay to distinguish between the roles, this can over time lead to situations that can be experienced problematic for both parties - Refine that you do not utter yourself on behalf of the Echo Organization, if it is questions on your role - Remember that the Internet is permanent, it can be difficult to erase what you have said	<i>Who should you present yourself on social media? – Be yourself. Act normal</i>
- Interact in the same way as you would otherwise have done. Use common sense. - Consider whether you should have contact with students / users / dependents in social media like Facebook or MSN. If so, think about how you act. - Be clear that you express yourself as an individual and not on behalf of the Echo Organization. - Enquiries aimed directly at Echo Organization are answered by administrators at the different accounts - Remember that the Internet is permanent, it can be difficult to erase what you have said	- Consider carefully whether you as a private individual should have contact with students / users / dependents or subcontractors on social media. Even if you initially think it's okay to distinguish between the roles, this can over time lead to situations that can be experienced problematic for both parties - Remember that the Internet is permanent, it can be difficult to erase what you have said	<i>What about safety? – Do not be anything silly. Think twice</i>

The mandate – becoming a permanent group

The BG members engage more directly with a different side of the organizational logics and formalities of the Echo Organization's apparatuses. In November, the "mandate" is approved by their managers, which the BG has been working on for roughly a year. In practice, the mandate is no more than a piece of writing, but it is of great strategic importance – it turns the BG into a permanent social media competence group within the ranks of the Echo Organization. The BG ceases to exist as a temporary construct, which has faced the danger of being closed-down at any time. The BG is no longer a *project*, but a permanent organizational construct. The acceptance of the mandate marks a year's formal existence and represents a major breakthrough.

The mandate has consequences in several ways. The BG members experience that the internal and external governing logics and formalities of the apparatuses of the post-modern bureaucracy are directly imprinted on their work practices, their organizing, and what the BG's objective is really about. The Echo Organization has certain standardized ways of running things or institutional practices that influence them. On paper, the BG changes from a loose

informal network to become a *formalized* unit, which gives it more rights and access to resources, but this comes with obligations and demands set by forces beyond their control. The BG is organized as a group and becomes an institutional arrangement within a larger institutional arrangement. The BG officially consists of coworkers from two separate departments, the Communication and IT Departments. It now also gets an appointed group leader or head who has a defined formal role with distinct responsibilities. The group leader is responsible for the professional and technical management and supervision of their work, which is supposed to be in accordance with defined goals and plans. The group leader is formally responsible for ensuring “effective utilization of resources, coordinate tasks between workgroups, assess progress and report results, perform administrative duties like making calls for meetings, and write minutes to coworkers and municipal directors”.

The Echo Organization has a variety of strategies for imprinting its governing logics of formal organizing on the new competence group. This is notable as the Echo Organization can produce organizational structures and apparatuses *around* the BG itself. A *steering committee* for the BG is appointed, consisting of the Municipal Director of Organization, the Communication Manager, the IT Director, and an advisor consultant for IT and strategy from the office of the General Director of the Municipality. They turn into the BG’s “owner” or patrons, which in practice is to embed the Echo Organization’s management structure into the BG. The steering committee is now the internal authority requiring reports and updates, but it equally has defined responsibilities, like setting goals, creating plans, carrying out overall priorities, holding regular meetings, and ensuring that milestones are completed and that results are fulfilled and delivered. The steering committee is responsible for determining any organizational changes in the group’s lineup. There is additional imprinting of organizational structures. A *reference group* is created, which consists of employees from several departments; especially those evaluated to be *early adopters* or “*ildsjeler*”, the technology enthusiasts, are to be included in it. This means bringing the BG’s colleagues into closer proximity. As part of this process, the BG is assigned formal directives, which are divided to be performed across the Echo Organization’s internal and external boundaries. The BG has the task of enhancing and developing the city municipality’s ways of communicating with its citizens and local businesses by use of social media. We also find an intention that the BG is to work at identifying ways to improve internal communications and collaboration in the Echo Organization.

In reality, the mandate has other strategic implications that push social media to the top of the Echo Organization’s operational agenda, making it equal to any other ongoing municipal priority. Outwardly, the Echo Organization is projected to be at the forefront on adopting new technologies, a role ascribed to the BG to sustain practically and strategically. To display that feature, social media becomes an embedded part of the Echo Organization’s cultural and organizational identity and is aligned with the city municipality’s value system. This means ascribing social media values like *communication*, *interaction*, *sharing* and *transparency*, which are viewed to be similar to the city municipality’s organizational values; *open*, *courageous* and *competent*. The justification for setting social media high up in the organization hierarchy, nonetheless, is that this technology is assumed to dominate the everyday life of the citizens and businesses that the public administration serves. And logically, when the citizens and other organizations are there, the Echo Organization needs to be in that private and public realm and adapt to them. But there is more. The BG’s mandate is included with one of the city municipality’s overall strategies, *professional interaction*. Professional interaction is assumed to be an important theme that will dominate the governing of the future of public administrations. Social media is a technology that can fulfill that goal, as it can enable collaboration and competence building.

But the flipside to the above is how the Echo Organization imprints new formal meanings and responsibilities, which express themselves more clearly in the mandate's secondary goals. These give clearer indication on the role of the BG and future directions on how it is to perform its work. These are also "pushed down" on to the BG, which must accommodate them. This means that the BG has to approach social media from a different angle, which has to be in accordance with the governing production logics and formalities of the current post-modern bureaucracy. For example, the BG must define *target groups* in the municipality; they should be able to document the potential *effects* of the new communication and collaboration technology; they must identify potential *benefits* and *challenges* of using social media. To fulfill this demands a specific role performance. The BG members are to provide *recommendations* on how to introduce new communication technologies, but also find out how the Echo Organization can best continue to work in this area. The BG is to act as an *asset*, which knows and can advise managers and employees on how best to respond to uses of social media. The BG is to use its expertise and knowledge to find out what is the "new" in new technologies and what opportunities they can enable. This is to be displayed in and written in *requirements*, which can enable the Echo Organization to know how to contend with future organizational changes. The BG is also given the possibility to *initiate* and *coordinate* projects, but with that come certain restrictions. The new competence group is not to be responsible for *introducing* new social media services. Instead, the BG's role is to be a type of a "coaching unit" where coworkers can send requests when they need help. This means that the BG is to be a *melting pot*, which explores the conditions taking place at the intersection between ICT, communication, and organizational matters.

Beneath the pretense of the mandate and a strategic organizational management discourse, prowls a different reality, creating a duality on what it means to work with social media in an organizational setting. The BG members now meet the invisible and active internal and external organizational boundaries in the Echo Organization. There are setback to the formalization process, as distinct pros and cons emerge. These express themselves across several lines, meaning that behind the recognition of the BG, there are contradicting views, reflecting a social epistemological battleground over what the intention behind BG should "be" and what and how they should work with social media in an organizational setting:

I-1: The mandate is an apologia for that we should be allowed to do stuff.

The process leading to the authoring of the mandate brings out various internal actors and priorities in the Echo Organization, which not necessarily share the same views on social media as the BG members themselves. They might have another agenda and are not always easily persuaded. Although the document itself consists of no more than 10 pages, from the perspective of the current head of the BG, for example, the process of authoring was an uphill struggle. And much of this deals with framing and defending the substance of the BG's core activity, professional identity, and range of operations within the Echo Organization. This has taken several turns and been influenced and negotiated in relation to which internal actor the BG members have interacted with in the Echo Organization, involving several reframings of what was supposed to be their core activity:

I-1: We were supposed to work with recommendations of tools that could be used for internal communication and collaboration. That became our mandate. We should talk about social media. That was our work, a competence group for social media. We went from a project to a group. That's important in the Echo Organization. Projects run from day to day, while a group hasn't a defined time frame. We also said that we didn't know how long the Web 2.0 thing was going

to last and how long we're going to work with it. We therefore shouldn't be a project... We were also asked to downplay the testing of Web 2.0, because they didn't understand why it was important. We were advised not to put much emphasis on the testing aspect, when we wrote the mandate.

Recurring engagement with internal actors, for example, has involved questioning technology framing over type of technology and how to work with communication in practice. The process of authoring the mandate entailed that the initial concepts of "Web 2.0" and its relation to the "Open Source Movement", moreover, that the notion of "testing of Web 2.0" to harvest experiences from their "sandbox", demanded downplaying and be replaced by other organizational terminologies. Emphasis on experimentation and testing led to ascribing the attribute that the BG was too "tool" or "technology" orientated, involving the allegation that they were more interested in the new information technology itself than the communicative practices social media enables. This has been a misconception the BG members attempted to correct, as communication has continuously been an embedded part of their initial work. The BG's main challenge has been the perceived absence of resources that could give them clues to the communicative practices facilitated by social media. Confronted with that challenge, they had to take the initiative themselves and learn the communicative practices from self-testing, which led to them working with exploring the meaning of "social networks" in an organizational setting by testing Elgg. This has been a different approach to learn new communicative paradigm of the social media universe.

Recurring engagement with internal actors had other consequences that recoil back on the BG members. They met other internal barriers that are hard to overcome, where one deals with negotiation and imprinting of dominating organizational and institutional priorities. As the Echo Organization has "professional interaction" as a top priority, for example, this means also that the BG must find ways to link social media to improve collaboration and internal communication in the organization they work for. This has again a consequence on rewriting of what is to be their core activity, moreover, it creates a self-perception on the need to downplay their professional identity, so that being and working in a "beta modus" could diminish. This facet surfaces especially when they start "trespassing" on the domains and boundaries of other departments with similar areas of responsibility, which the BG potentially challenges and with engagement with the powerful internal management structure:

- I-1: Earlier it was about social media, open software, etc., but when we came out of the IT Department's office spot and met people from the Communication Department, which had a different focus, and the Municipal Directors, who also had a very different focus, which was on the citizens, this led to ideas about "How can the Echo Organization use Facebook and Twitter to reach out to its citizens?" or to "create better services for them".

Engagement with the Echo Organization's management structure is demanding. One deals with gaining access to and the attention of managers. They are busy and imbued with a meeting culture regime. Moreover, there is turnover of managers and they have different levels of enthusiasm about social media, a facet seen as an internal barrier. Others deal with overcoming the skepticism towards social media. This means that initiatives the BG believes are important require organizational lobbying. The challenge has been to create good answers to "why" social media is "important". Overcoming that involved many meetings with middle and top managers from the management structure during the authoring of the mandate. This work is challenging as you need to be a good sales-pitcher and argue in convincing ways. This implies learning the tribal language of the top managers and dealing with the potential goals managers might set for

them. But managers can behave dually in that regard. On the one hand, they are positive and support their employees, but on the other hand, they set expectations on deliverables, if resources are to be allocated. Managers have an agenda and work under priorities and interests fronted by other actors in the Echo Organization. One of the difficult demands the BG has experienced, in this regard, is accommodating the success they have become themselves; they need to create “success stories” and services that benefit the municipality’s citizens. But when the BG is an *internal* actor that supports municipal departments that work more externally, it meets an impasse.

The drafting of the mandate leads to issues of demarcation between departments, reflecting another internal barrier. The BG’s interest in social media entails working with communication. And the Echo Organization has a department working with that already. Although the BG started out in the IT Department, coworkers from the Communication Department also conducted semi-testing and engaged with Web 2.0 applications. Here, the beliefs about social media are somewhat different, reflected in greater professional skepticism:

- I-3: In the BG, they have been more technical, more open to the medium, while in the Communication Department there has been more focus on journalistic aspects, because there are many journalists working here. They are for example used to comments on the web pages to newspapers, which they see as rubbish. The equivalent to that are comments on Facebook, which is a slightly different way of looking at it. The comments fields on the web pages to newspapers are just for people who just say things to say things. They see Facebook as equal to that, as it is open to all, where people can come with their spam, in a way. It has not always been like that. Facebook has not been the same kind of rubbish bin as they have been in the comment fields on a newspaper site. Some of the journalists would disregard it and see it as not a serious medium.

Beyond the organizational boundaries of the city municipality, work turns out differently. The BG receives recognition and credit from peers. Their blog and work is benchmarked as an actor who has set social media on the top of a public organization’s agenda. The Echo Organization is nationally referred to as the “Web 2.0 Municipality”, the best in its league on adopting social media and building competences. If laggard municipalities are to learn from somebody, then they are urged to look to the BG in the Echo Organization and learn from them.

Phase 4: 2011 – Creating strategies for use of social media

There are consequences of the formalization process. As the BG members lose their image of being an expert group that tests social media in their “sandbox”, they compensate by having greater focus on the communicative strategies of using social media in an organizational setting. 2011 is the year for *strategy work*, which entails approaching social media from a conceptual perspective. The BG members develop an organizational social media literacy, which combines aspects from the organizational logics and formalities of the Echo Organization’s apparatus with cultural logics from contemporary Internet culture. This seems to produce a hybrid communicative vernacular, which imports aspects from the Internet’s participatory culture with the formal tone of working in a public administration. Central to it is the creation of a complex communicative language for practical use that ensures safeguarding contradictory principles and actions. On the one hand, the BG wishes to stimulate colleagues to increased internal and external online engagement, which involves creating increased transparency, while on the other hand, one has to perform this in light of procedures and interests set by a public organization

on employees; for example, not violating information safety or stating personal political opinions, and safeguarding confidential information. The BG's way of working with this is to ask a series of difficult questions; How do you present yourself as an employee on social media? What organizational goals are to be embedded when you do that? How does a municipal employee "do it in practice"? How can distinct social media applications be adopted to fulfill the goal of professional interaction? etc. The answer is that an employee has to learn to perform his or her professional identity within the negotiative boundaries of an accepted and uncertain code of conduct.

Table 6.6 Key words in 2011.

Period	Key words
2011	Mantis, Elgg, Status.Net, Zoho, Google Docs, Google Wave, Teamlab, Teambox, Open Project, Yammer, Twitter, Facebook, WordPress, Wikispaces, My Feed, Creative Commons, RSS, Google Calendar, CoTweet, DestroyTwitter, Tweet Deck, hashtag, Prezi, Kundo, Beyond Bullet Points, "The silo effect", "water-cooler effect", "coffee machine effect", "what's in it for me", "distortion and small-talking", "listen, share and be relevant", "trolls", "skimming competence", #hashtag, @mentions, "trial and error"

Strategy work surfaces as a theme for a variety of reasons; the BG creates a *channel strategy*, a piece of written text describing how the Echo Organization's priorities can align with employees' use of social media; having a channel strategy is a requirement from their managers as a consequence of formalizing the BG; they disseminate their strategy work as it is the main message in their presentations at conferences and workshops they attend throughout the year. Members of the BG are now valued speakers. They hold presentations about their work in the Echo Organization and beyond its boundaries. But strategy work is contradictory, highly abstract and very difficult. This appears to contend with the practical application and translation of the guidelines into practices that have to be understandable to others and new social media users. Top organizational discourses have to be translated into practical use, which now surfaces around integrating goal-thinking terminologies. This arises as an issue when employees are to create and administer official municipal social media accounts and when employees interact online. This can be relevant when employees have to deal with aspects of the web culture like engaging with Internet trolls. To create ideas on "why" and "how" to use social media in practice, the members attempt to give meaningful explanations for how coworkers can use social media for internal and external communications and create opportunities for collaboration. But to set practical illustrations behind strategies you need creative thinking.

To encounter it, the BG members look to another organization to find inspiration. At the beginning of the year, they attend a post-secondary education course at a university, giving them official study credits and formal competence in organization and technology management. They learn more about *sociological theory* to create greater awareness behind their work practice and the organization they work in. The BG members study theory and concepts that explore the relationships between social network, social capital, and new media. They are interested in how this can be applied in an organizational context. They turn their emphasis to how *informal* relations between colleagues in organizations can be used and what role new media can play in that regard. They take interest in how this can be used to enhance internal communication. The SNS Yammer is used as a case to explore this idea. They conduct a qualitative research project, with defined research questions, and a population of informants, taking on the role of researchers. They write an academic paper and submit it to their professors, who give them an "A". This conceptual work results in seeing social media as "*an arena for professional small-talking*". This academic paper appears to have major positive implications

for enhancing the understanding of their work practice. Sociological theory helps in many ways, foremost to get a clearer view on how to approach strategy work. But use of sociological theory also teaches them rhetorical tricks on how to crack the code for enabling actors to see the social resources embedded in organizational structures which can be used for collaboration, informal ties. In so doing, they make social capital into practice. The BG's way of showing this is to argue that the Echo Organization is full of social resources that others can make positive use of, but they are assumed to be confined to closed networks within departmental borders. Employees hardly speak with anybody beyond their own department. The BG's task is to *extend* these social networks and make employees bond and bridge their ties by use of and engagement in network technologies. They want to motivate coworkers to network by use of social media and to help them build social networks. The BG's way of illustrating this is to compose and import a range of metaphors that play on the positive values and potential resources embedded in social media, which can motivate employees to adopt a new technology. Mastering the social art of "small-talking" between colleagues on Yammer, for example, is a type of action that can *connect* coworkers working in different departments, which can potentially lead to reducing departmental boundaries.

The BG members demonstrate exceptional skills in this field. On their blog, we find blog posts showing samples of how the BG use various terminologies, metaphors, and myths, which play on the positive benefits of using social media in organizations. For example, engaging on Yammer is projected as an informal chat between coworkers, similar to that seen at coffee machines, an action that can prevent the "*silo effect*", create a "*coffee machine effect*" and "*water cooler effect*", descriptions aimed at illustrating how technologies can be applied to reduce organizational boundaries and create work-break spaces where colleagues can congregate. The BG also shows other metaphors on record. Dealing with "distortion" or the information overload problem that social media generates, you can solve that by installing filters like Twitter's "@mentions" or "RSS Feed". The BG argues that one can deal with the Internet's information overload problem in other ways too, by developing "*skimming competence*". You can join the online conversation by "*listening, sharing, and stay relevant*". And to conclude, we also learn that the work of "gardening" is essential to build a critical mass in SNSs. If one does not apply enough fertilizer, implying being proactive and sharing on SNSs, one will fail in creating a sustainable community.

There are disadvantages to strategy work, as it may reposition the BG's role in the Echo Organization. They have harvested recognition from peers working externally to the city municipality, but on their own turf, there is different story. Their colleagues working in other departments begin to know *of* them, but it is unclear what they "do". This brings the possibility to give clearer attention to the fact that their main core activity is to contribute to improve collaboration and internal communication. But their history backfires on them. To outsiders they are still seen as too "technical", but the BG members want to project themselves as working with "communication". The testing that allowed the BG to franchise and claim authority is now re-approached under a different light. The BG members now argue it is necessary to continue performing it, for example, if they are to uphold the intention behind the mandate:

For us to be able to perform testing and implementation, we have for a long time seen a great need for stable conditions and close cooperation with software developers. The members of the BG have professional background in media and communication. We lack the technical expertise. Due to the fact that the IT Department has outsourced its IT services we have not had a professional community to exchange ideas with. This has resulted in the development of tools like Elgg, Mantis etc., which have been operated by very few individuals without any formal training in coding. We have achieved a lot, but

with the growing expectations from the organization that things are just expected to work and look absolutely smashing, that we would like to have a button for a well working archive system, we see that we need to spend more resources on this.¹⁸

Technical testing is hence moderated, but still performed. On the BG's blog, we learn about "old" and "new" social media platforms. Mantis, Status.Net, Zoho, Teamlab, Teambox, Open Project, CoTweet, Prezi, and Kundo, have not been previously mentioned, while oldies like Google Docs, Yammer, Twitter, Facebook, WordPress, Wikispaces, Google Wave, and Google Docs are recurring themes. They also dig into how various user features work and explain them in great detail. We learn about how to use RSS feeds, to search after "@mentions", and how to set up groups in Yammer. The BG members also explain in blog posts how to integrate features between platforms, like synchronizing different calendars into one, like between Outlook and Google Calendar. But it is the deep-dive into technical and social aspects of SNSs, which dominate the technical reviews. We learn about how they set analytical differences between Facebook, Yammer, and Twitter, moreover, how distinct software can align and combine them, like TweetDeck, and the embedded features that now have come to define them, like Twitter's now famous "#".

Creating a channel strategy, how to deal with the whole social media landscape

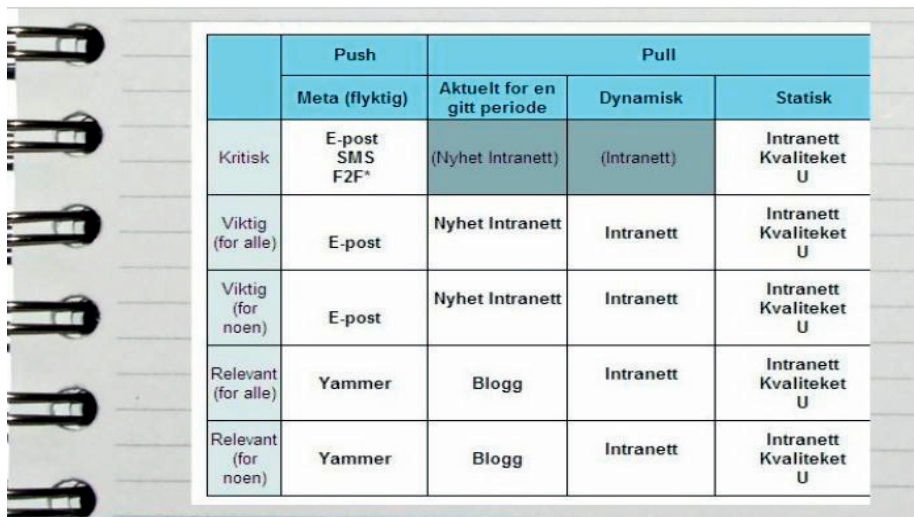
An essential theme rendered in the strategy work is composing a road map for the use of social media in an organizational setting. The road map contains a range of communicative strategies to navigate in a complex and uncertain and changing social media landscape. The road map is aimed at all employees in the Echo Organization. To help colleagues, the BG has taken on the role of projecting points of interest, which can be illustrated by looking at the text representing the end-result of the BG's strategy work, the *channel strategy*. The channel strategy is an answer to calls from coworkers who asked for advice. The channel strategy is the first time we see the BG's definition of social media, "relation platforms based on user-generated content", which it defines as a platform to create dialogue between connections of people. But social media is approached as a *channel*, offering possibilities for online social interaction. In that regard, the BG members have only noted that their colleagues often do not know where to start or how to use the infinite possibilities available. Using social media offers many challenges. For example, the social media landscape has a vastness and a media richness that can be difficult to navigate across. To solve that, the BG attempts to come up with answers to specific questions: Why engage and share? What channels should one use and for what purpose? What information is important, what is not? Where should the information be stored? And what is "nice to know information" and what is relevant?

The BG advises their colleagues first to understand that engaging in social media is *not* about absorbing everything. One should not *engage* with information overload, but rather navigate *around* it, so it does not distract and take away your attention from your work. One needs to have a clear focus on what is *relevant* as part of a professional identity to collaborate with others. There is a vast range of social media tools one needs to consider too. Different media serve different purposes and should be used in different situations. To overcome the recurring challenge embedded with use of social media – information overload – the BG outlines certain communicative strategies. Their answer is that users should tailor their own user pattern as suited to their individual needs. This means tailoring personal use against several paths. Colleagues can design *personal networks* with themselves as the node and develop connecting strategies to interact with people. One must to learn how to *filter* and *connect* on social media

¹⁸ Citation from a blog post authored by the BG members.

platforms and the information one interacts with. This involves establishing *personal boundaries* and *conceptions* on the quality of the information at hand. Some platforms are better than others for retrieving and pushing information. A way to solve this, for example, is to evaluate personally the properties of the social media platforms one wants to use and the information they communicate. Employees need to consider the *importance* and *duration* of the information. It can be temporary, sporadic, dynamic, and static too. Some information concerns everybody, some not. Not everything is relevant. The BG's message is that it is important to know the value of the information. The BG members advise users to put focus on appropriateness, as they evaluate and rank different communication tools. Meetings, face-to-face, SMSs, phone calls, telephone meetings, microblogging, intranets, chat programs and e-mail systems are suitable for certain types of communications. These can be used for one-to-one, one-to-group, one-to-many or for general diffusion of information to everybody. Intranet, local storing, wiki and blogs, have other qualities and can be used for posting status updates and background information. Meetings are good channels for one-to-one communication, while microblogging can be a suitable tool to diffuse information to a large audience. The BG also has suggestions on the nature of the information at hand, which requires to be considered; employees need to remember that it can last a long period of time, change, and have a relative degree of importance.

Figure 6.4 The BG's advice on affordances of social media.



	Push	Pull		
	Meta (flyktig)	Aktuelt for en gitt periode	Dynamisk	Statisk
Kritisk	E-post SMS F2F*	(Nyhet Intranett)	(Intranett)	Intranett Kvaliteket U
Viktig (for alle)	E-post	Nyhet Intranett	Intranett	Intranett Kvaliteket U
Viktig (for noen)	E-post	Nyhet Intranett	Intranett	Intranett Kvaliteket U
Relevant (for alle)	Yammer	Blogg	Intranett	Intranett Kvaliteket U
Relevant (for noen)	Yammer	Blogg	Intranett	Intranett Kvaliteket U

Another side of the channel strategy is how the BG develops communicative strategies for using social media to master *internal* and *external* communication. This is needed as new models of network communications will emerge, involving the projection of the claim of the need to abolish the e-mail. Citizens are assumed to interact on several social media platforms. Social media can become the principal communication channel, implying that public employees and organizations can be required to adapt to that logic of communication too. Transformations in the external environment imply the need to re-approach the practice of internal communicative strategies. In this regard, Yammer is a microblogging service for internal organizational communication, a hybrid between Facebook and Twitter. Yammer has certain properties. Users can create groups and share professional experiences; it is a type of virtual open office landscape serving the same purpose as the water cooler. Yammer can allow users to get answers and tips on interesting topics. Users can network and get to know others in the Echo

Organization. Engaging on it is similar to small talk, which can create connections. You can do this on issues that are of professional relevance, but to master that requires personal “gardening”. To create a dialogue with someone, you need to be proactive and apply some fertilizer to make your personal and professional network grow. The BG suggests that certain media can be used to perform distinct internal communicative practices, like communicating one-to-one, one-to-a-group, one-to-many, or just simple sharing. Status updates, background material, guidelines, and reports, can be pulled or retrieved through distinct social media channels. Chat programs can be suitable to communicate one-to-one, but not to share information. An internal wiki and intranet are useful examples for retrieving information on status updates. The flipside to the external side, which have their own suited social media platforms, employees can use Twitter to “skim” the Twitter stream, for example. By combining these communicative strategies, an employee in the Echo Organization can uphold the end-message from the BG’s strategy work, which is to use social media “to listen, share, and to be relevant”.

Figure 6.5 Matrix explaining what social media enables users to do.

Push								
Antall mottakere	Møte/F2F	SMS	Telefon-samtale	Telefon. møte	Mikroblogg	Nyhet Intranett	Chat	E-post
En til en-kommunikasjon	5	3	5	5	2	5	5	4
En til gruppe-kommunikasjon	5	2	5	4	5	5	3	5
En til mange-kommunikasjon	5	5	5	5	5	5	5	2
Deling / spredning	5	5	5	5	5	5	2	2

Pull					
Type informasjon	Intranett	Kvalitetet	U	Wiki	Blogg
Statusinformasjon	5	5	2	5	5
Bakgrunn/ utdypning	5	5	3	5	5
Høringer	4	5	3	4	5
PPR (prosess, prosedyre, retningslinje)	5	5	5	5	5
Oversikter	5	3	5	5	5

Bygger på vurdering av kanalers egnethet (studentarbeid) gjengitt som tabell i forelesning i faget SOS6507 Samhandling, nettverk og IKT.

From learning netiquette to creating standards for organizational social media use

There is a practical side to strategy work. To construct the communication strategies on how to use social media in an organizational setting, the BG members needed a social code of conduct to base them upon. Interacting on social media included approaching the difficult question of *netiquette*, which can be understood as socially accepted norms and values on how to appear in an online or digital situation. Here, the BG members have been challenged. On the one hand, there is limited availability of textbooks on *social media netiquette*. The BG members could create the roadmap on netiquette by making suggestions based on reading the material of other authors and simple testing of social media tools. On the other hand, they could learn the socially acceptable conduct on using social media by taking the role upon themselves, learning from their own experience by performing their own online interaction – a practice they have performed throughout their history. In this regard, the BG members have not only technically tested a range of social media applications, they have also adopted certain social media tools

which they use every day and are part of their work practice. These are used for external and internal communications and to organize their internal work processes, crafting an ICT ecology. This consists mainly of their blog, the SNSs Twitter, Facebook and Yammer, the free web-based word processor Google Docs, and the bug tracking system Mantis. The experience from using them has later been translated into standards for organizational social media etiquette and served as a template for developing strategies on how colleagues can use social media.

The blog has been used as a platform for external communication, foremost as a “professional blog” to share and make their work known and visible to their professional network of peers. The blog has been used for learning and to reflect upon their own practice and to engage with others. The blog is used as a vehicle to pick up other’s experiences, due to the absence of an established media and communication community interested in social media in the Echo Organization. The BG members have taken turns in writing blog posts and tried to publish a new post every second week. The exchange of experiences on it has seldom had any controlled logic, but been more guided by randomness, creativity, and improvisation. This is described as following the idea of “they follow and look at us and we follow and look back at them”. The BG members have followed defined professional social media experts, municipalities, and other betas they admire. They have commented on their blogs, peers have done the same on theirs, which has eventually led to building an external network and connections with people. The results of this work led to a much clearer focus on the larger intent behind their competences.



But it is the extensive engagement with three SNSs that has played the crucial role in forming the BG’s knowledge on netiquette. Twitter and Facebook are used for external communication and Yammer for internal communication. Twitter has played an important role as

the BG’s extended professional arm particularly as a platform to learn about particular netiquette, which is not simply mastering how to perform. Learning netiquette has been part of a steep learning curve, being acquired by a “self-learning-by-doing-in-practice” approach of online socialization and enacting connecting strategies with new people in the Twitter community. From this socialization, they have learned and constructed communicative strategies on how to engage, share, and communicate with people. Two BG members described their user experience as starting with an explorative approach in the private sphere, to be reshaped thereafter into a professional netiquette fitted for an organizational use and practice. They started using Twitter, because it was perceived as “natural” and others with similar professional backgrounds used it. As with any microblogging service, the first barrier was to become familiar with Twitter’s user interface and how to write tweets within the limit of 140 characters. The BG members registered on Twitter around 2009/10. At that time, Twitter users tweeted anonymously using nicknames, were few in number, and communicated with each other in English, not in Norwegian:

- I-1: The culture was a bit that everyone followed each other and it was important to have many followers. If someone followed me, I followed them back. At the time, English was the Twitter language and there were not so many Norwegians on Twitter. There has been a change as we eventually moved to tweet in our mother tongue.

The BG members describe this first period as positive and enthusiastic, which is portrayed by one of my informants as that “a little group of Twitter users had a nice dialogue going”. Central to the Twitter netiquette was *informality*, reflected in how users were willing to be open and equal in their online engagement with unknown people. The online discussion was “friendly” and consisted of a type of “harmless” code, allowing users to build personalized online identities. Certain Twitter users tweeted about private matters, permitting them to manage and franchise social uniqueness or personal signature. This meant the acceptance of a role performance where Twitter users seldom applied a high degree of self-censorship, so that users had an ongoing dialogue where many participated and talked to each other. But when new actors entered the Twitter stream, the condition for the Twitter dialogue changed, as new roles and expectations for the social code of conduct emerged. This generated the development of a new role performance, which gradually surfaced when new users started establishing *distinctions* or *boundaries* between “work” and “private”, so that users exercised a higher degree of caution on what they published and how they presented themselves:

- I-1: In the beginning, my Twitter stream consisted of people interested in technology and Web 2.0. It was a small group, testing people, beta people, or super-users, or, there is another word for it, “early adopters”, people who explore technology, who are motivated by a “trial-and-error approach”. But now that user group has managed to get other people to use Twitter, like “social media experts” and journalists. That brings changes.

Consequently, the online communication turned to *professional* and *formal*. This is observed in many ways. The loose small talk diminished and a new tone in the communication style emerged. The BG members observe that the new Twitter users speak directly to each other by extensive use of @replies and mentions. The former friendly Twitter humor and irony changed into a scarce commodity. Users also tweeted under their full names and are no longer anonymous and you get full insight into where they work. Awkward instances appear. Certain Twitter users act as the so-called “Twitter Police”. This group of Twitter users tries to superimpose philosophies of “correct netiquette” by pursuing grammatical errors and typos in popular tweets and ridiculing them to the rest of the Twitter community.

But a drastic change is best described by another BG member, who saw that the netiquette changed to become “elite orientated”. The Twitter dialogue turned into a “symbolic positioning elbow contest”, where users fight to become the strongest voice and the undisputed opinion leader:

- I-4: There is a netiquette on how to communicate with people on Twitter. In the beginning, it was a very cozy and informal tone. You had a lot of, “Thank you for that!”, “Absolutely fantastic!”, “You are so nice!”, “Thank you very much for retweeting me!”, “Fantastic!”, tweets like that.
- R: Very enthusiastic?
- I-4: Yes, a bit “circle jerk”, as they call it on reddit.com, if you’ve heard about it. Whatever you say, you get positive feedback, no matter how silly it can be.
- R: Does it appear genuine?
- I-4: Slightly pompous and excessive, I felt then. It’s not so much the case for the moment. Now, it’s a bit harsher. They use Twitter as a discussion forum, although it’s not suited for that. Twitter users have to be more intensive, since you only have 140 characters to express your opinion. The tweets develop into very strong statements and you get very polarized discussions.

The BG soon came to regard the Twitter dialogue as a mere extension of the public debate, which normally runs in the traditional media and around the dinner table. This experience triggered the BG to create a variety of communicative strategies, which streamline Twitter use to an organizational context. This means restructuring Twitter use against several trajectories. One consists of implementing work practices around administering official municipal Twitter accounts and formalizing them into the Echo Organization. The BG creates an official account for the Echo Organization and another for the BG, in addition to the personal accounts of each BG member. The official Echo Organization Twitter account is administered by and is the formal responsibility of the Communication Department, because that department officially handles all external communication. There are however many Twitter accounts in the Echo Organization, which are under direct local departmental management control or part of a project. These do not fall under the official responsibility of the BG to maintain. But official Twitter accounts must be manned, which involves ongoing monitoring of the role and public position of the Echo Organization in the Twitter community, a task maintained by a BG member. To perform that task, a male BG member uses TweetDeek, which he combines with monitoring of all traffic on Yammer in the Echo Organization. He has installed features, which notify him on all Twitter activities that mention his employer. The monitoring of the Twitter stream is done in-between other tasks at his desk and described as a “listening job”:

- R: During a workweek, how much work does Twitter monitoring involve?
 I-4: Very little. Now, there are complaints on snow plowing. But it's not very much there either, maximum a tweet a day.
 R: That's not much?
 I-4: It's very little. We don't talk about using major resources.
 R: It's almost like responding to a chat message or an email a day.
 I-4: Yes. Often there are tweets about the Echo Organization, which I have to redirect to other departments. That's not much work either. The thing that's time consuming are things that I don't know the answer to. And I don't know who knows what. For that, I have to use Yammer and perform internal enquiries. And often I get a response from a colleague.

In reality, Twitter administering acts as a type of “digital switchboard”, a front-desk or reception function, as citizens often contact the BG member about specific topics, which often are the formal responsibility of a municipal department. For example, this can be enquiries about formal admission routines to a kindergarten or information on a specific construction project going on in a suburb. In that way, one can compare monitoring of official Twitter account as office clerk work, similar to working at a customer call service center:

- I-4: It's not much work, provided that I manage to delegate the enquiries to those who know the answer. But sometimes it requires digging to find out what it's about. Actually, it's not appropriate that I sit and respond to these types of enquiries. It should really be handled by a front desk clerk, who has full control over what and who knows what in the Echo Organization. I believe that they are the most qualified and have an overview. They get calls and emails every day. In that sense, they should manage official tweets on Twitter.

Interaction on Twitter has in fact created another access point into the Echo Organization, requiring continuous administration. Twitter monitoring brings up the question on whether an employee should be passive and answer all tweets from citizens or pursue a proactive role and engage with all tweets that address the position of the Echo Organization, which is a controversial issue:

- I-4: I try to answer most of the things on Twitter. We were very inspired by a social media professional who visited us the other day. She talked a lot about listening. First, you have to join the conversation. We understood that part and that you should be relevant. You should share things that give a benefit to our citizens. We didn't manage to achieve that at first. How do we know if it's relevant? It's about listening. One must find out what interests the citizens and those who follow you on Twitter. What are they talking about? And then it's about being proactive. Let's take snow plowing, for example, which is a very hot topic these days and is easily exposed for public criticism. Why haven't there been plowed for snow here and there, why haven't the municipality salted the roads? Instead of just receiving public criticism, one can be proactive and engage with the matter in advance. Not only be reactive and respond to things that come in. We have no resources, they argue in the Echo Organization. We can't use our manpower on that, because there is a debate on a discussion forum somewhere. They talk a lot about that in the Echo Organization, that we don't stand up. Public claims against the Echo Organization are neither denied nor confirmed in that regard and they are somehow allowed to flourish. It's more or less the same on Twitter, if there is some outspoken criticism we have to deal with it. That's my take on it.

This user experience is another example of how the BG members streamlined a communicative strategy to an organizational context. The BG takes a proactive approach suggesting that it is imperative to contend with the challenging aspects of social media communication. Instead of running from it, you should engage with potentially disgruntled citizens and answer negative criticism from Internet trolls, a point also adopted in the Echo Organization's guidelines. This communicative strategy aims at creating a positive experience for the citizen and of the Echo Organization in the public realm. Moreover, it places itself into the larger end-message from the BG's strategy work on how to use social media, which is "to listen, share, and to be relevant". On the other hand, the reality is that severe public criticism of public organizations on Twitter is microscopic and limited to typos on official municipal web pages. In many cases where municipal departments create official Twitter accounts, there is little evidence of professional interaction or dialogue with the citizens. Instead, the Twitter accounts are often used as a public notice board to tweet operational messages on municipal activities. Consequently, this has led the BG tentatively to conclude that Twitter is not a highly suitable tool to represent a public organization:

- I-4: There are two aspects. The platform is made for people, not organizations. Twitter is designed for communicating orally, in a quick and personal way. That's really the basis for the tool in itself. You can argue that it gets a bit peculiar, when a public organization is to tweet something within 140 characters on behalf of 13,000 employees. When we do that, our opinions get a bit superficial and general, boring, perhaps. It becomes dry and bureaucratic. To give it any added value to citizens who follow you, one has to be a bit more personal. And since the communication style on Twitter is mostly oral, it becomes challenging to adapt that to a formal administrative language, which is predominantly written.

This observation led the BG to conclude that Twitter can be best adapted to an organizational setting in two ways. First, as an answering service, and second, as an instrument for sharing and learning, where the latter is perhaps the most suitable. Twitter's strength is as a platform providing employees with access to a vast pool of resources and information. This appears to

be the individual experience of the BG members. Long-term engagement has caused the BG members to tailor their own Twitter network of followers, determine level of participation, and form a sense of netiquette. As social media professionals, they follow their kind and pay attention to what they do and talk about. The BG members have streamlined and created a variety of communicative strategies, which is the end-result of personal research. Here, the BG members have many interesting suggestions on how to build a Twitter stream or find a “network formula” to acquire information of high quality. For example, the goal is not to have as many followers as possible, but 500 to 600 followers can be sufficient. There is no point in following celebrities, as some of them can tweet so much that they only function as spam in your Twitter stream. Also, the BG advises colleagues not to read *all* tweets, as it will only distract them from their work. Instead, employees should be critical of whom they follow, a feature that has led the BG members to unfollow many of those they initially followed. Perhaps an interesting communicative strategy is that the tailoring of a personal Twitter stream and the community’s active sharing will produce the information quality:

- I-4: I don’t think you get high quality information from just following individuals. Our beta group leader talks about how all good things always surface to the top in the end. And by that, he means that things get retweeted. Is there high quality information, something that engages, that gets often retweeted. And so sooner or later, something always gets retweeted in your stream. Then you see it indirectly... And on the Web, there is just so much information. Twitter can act as a filter that highlights things that are relevant for you. If you just read a bit, you get a lot of links, which others think are of high quality. And then you can check them. In that way you’ll get lots for free, by choosing a certain type of people... Twitter is also a channel where you can share something with many at once. If there is a conversation going on there, many will see it, instead of taking it many times with separate individuals, it’s enough to do it once, so that everyone sees it. In that sense, you have managed to diffuse information much more efficiently than by using traditional media channels.

The most important communicative strategy adopted by the BG is teaching employees to find the right *balance* on how to interact on social media. Behind the strategy “to listen, share, and to be relevant”, the BG encourages colleagues to be present on social media. In so doing, a coworker’s online role performance must be in accordance in what is expected from an employee working in a public organization. They should engage with colleagues and citizens by being informal, but need to do so in a professional manner.



The BG’s engagement on Facebook paints another story. The Echo Organization has many official accounts. By the end of 2011, the BG estimated that 40 different official municipal Facebook pages had professional interaction between employees and citizens. The BG believes there are more official municipal Facebook pages than that, as not all of them have been reported. Facebook is used for external communication and is by far the most used and popular of all the SNSs. Here, we find that same properties as we saw with Twitter use. The BG members have developed their own set of communicative strategies for Facebook use, adopted for an organizational context, containing specific recommendations for role performance suited for digital situations. These suggest being more *formal*, as the Echo Organization has *separate* guidelines for Facebook use, which serves as supplement to the general guidelines for social media.

As we learned earlier in the chapter, the BG members looked to other organizations for inspiration when drafting the Echo Organization's social media guidelines. There is another tale behind the creation of the city municipal guidelines for Facebook. In fact, these were *not* been authored by the BG members, but have a different source, originating from a different place in the Echo Organization. The Facebook guidelines were first written by colleagues working in the Department for Adolescent and Educational Affairs, being initiated by an *ildsjel*, a local technology enthusiast. The motivation for creating them was that this department has direct interaction with a segment of the population the Echo Organization serves, young parents in their 20s or 30s. The department has extended contact with this user group, because it is the principal organizer of admissions of children to the city municipality's many kindergartens. This makes the department popular, as it gets many inquiries every day, either by phone or on social media. Based on that experience, the department staff decided to author their own guidelines for Facebook, as their typical users are those who are likely to traverse the Facebook universe. The Facebook guidelines were authored because staff at the Department for Adolescent and Educational Affairs evaluated the need for defined local strategies to deal with external communication. When the BG members encountered them, the guidelines were evaluated as suitable. Consequently, the BG readjusted them to represent the Echo Organization's official guidelines for Facebook use. This adaptation involves a process where local user strategies are "imported" to be later "appropriated" to represent larger intentions and representations.

The Facebook guidelines are as follows:

When creating a Facebook page, one should think through and implement the following points:

- *Facebook is a channel of communication with the inhabitants of the municipality.*
- *Facebook is a supplement to other channels, and not a replacement. All information should be publicly placed primarily on the municipality's official website. On Facebook, we can publish links to these sites.*

We want to achieve increased availability:

- *as we reach more groups of users*
- *as we are present in more channels*

and increase the possibility to have dialogue with citizens:

- *we can quickly provide answers to questions*
- *we can get better insight into the population's needs and point of view*

and effective dissemination of information:

- *we use multiple channels*
- *users spread information to their friends*

The Echo Organization's Facebook guidelines contain many other communicative strategies than those mentioned on the previous pages. For example, when an employee creates an official municipal page, there is a defined set of duties one has to address. An employee must identify a target group; there are defined roles and responsibilities in administering a group page; department managers are the content owners and are legally responsible for any digital content; any page requires ongoing monitoring, and specific inquiries from users have to be redirected to the responsible office which an query concerns; all online inquiries have to be answered; there is a defined response time for when an inquiry needs to be answered, which is set "as soon

as possible and within the next working day”; administrators should set up alert notifications to personal email accounts, so that they are aware when a new post is published and that one always has an overview of what is going on a Facebook page. The guidelines contain recommendations on how to deal with public criticism and negative input from Internet trolls. Public criticism directed at employees should be deleted immediately, but general criticism should be replied to, and this should be done by answering factually to correct errors.

The Facebook guidelines is example illustrating how actors attempt to streamline properties from organizational apparatus on the adoption and managing of an SNS. This is visible as we observe that several traits from *goal-thinking management* are embedded into the Facebook guidelines. This aspect surfaces as a factor because many municipalities and public agencies discuss an important question: “Why and for what reason should a public organization be on Facebook?” A recurring answer to that question is because “the public” they serve are there. Consequently, organizational presence on Facebook can be beneficial for a number of reasons, as it can be used for diffusion of important and relevant information. Facebook can be used for notifying citizens about vacancies, announcements, hearings, meetings, etc. But adopting Facebook in theory and creating guidelines has a practical side. The Facebook guidelines are the outline of a new job description and new work routines. This means that creating an official municipal Facebook page is a call for organizing and assigning of new roles and responsibilities and involves working with external communication on a decentralized level in an organization. Facebook pages need ongoing monitoring, presence, and participation, meaning that someone has to perform it in practice. This task normally falls on those who take the initiative in creating a Facebook page. In that regard, unofficial practice is that any department can create its own Facebook page, implying that there is no “central command” that administers all online traffic between the Echo Organization and the citizens, for example. Instead, each department is encouraged to create its own Facebook page, involving that we find distribution of functions on external communication. This can turn into a challenge, as the Echo Organization has over 200 different departments each of which can make and administer its own public Facebook page.

In that regard, we can observe the development and performance of distinct work practices, which emerge from the administration of Facebook pages. These are maintained in the same way as the Echo Organization’s official Twitter accounts, but with differences. A female BG member is involved in administering two official Facebook accounts, a job she shares with two colleagues from the Communication Department. Together they are responsible for administering a Facebook page representing the *city* where the Echo Organization is geographically located and another representing it as a *public organization*. The Facebook page representing the city is far more popular than the page representing the Echo Organization as a public organization, in terms of likes and followers. The female BG member explained in an interview that her colleagues from the Communication Department created the official municipal Facebook pages around 2009/10, which was the same time as the BG created the Echo Organization’s official Twitter accounts. There has not been a formalized decision or policy to appropriate Facebook into the Echo Organization. In contrast, we see evidence that coworkers merely registered and started using Facebook to acquire user experience, an action that later led to the verbalizing of the Facebook guidelines and formalization of responsibilities. Now, an Internet Editor in the Communication Department is responsible for the content published on the Echo Organization’s two official Facebook pages. The use of Facebook has involved a learning curve, being part of a trial-and-error approach. For example, the colleagues first looked to how other organizations maintained and organized their official Facebook pages,

an experience they have later used to get a better grip on what type of digital content could be published and how one creates an online dialogue with citizens.

The Echo Organization's two Facebook pages are monitored each day. This work practice is a dual way to work with external communication. The colleagues regularly write updates on municipal and operational information and news stories on what happens in the Echo Organization. They answer inquiries from citizens and deal with potential public criticism. There is a formal policy that negative criticism has to be dealt with quickly. In reality, there are few cases of Internet trolling, as the feedback from the citizens is mostly positive. Official Facebook page administration is similar to maintaining a newspaper web site, as the employees from the Communication Department use their formal education and work experience from professional journalism to oversee Facebook traffic. In a sense, the Facebook pages are under some degree of journalistic control. The challenging work, however, is finding answers to the many inquiries from citizens. Many citizens have questions that concern the responsibilities and areas of expertise, which are often beyond the BG member's knowledge of the Echo Organization. This means that working with external communication on Facebook pages turns into a front-desk management task. Official faceworking is the duty of an office clerk, similar to working at a customer call service center, being a type of *digital switchboard*:

- I-3: Often we don't know the immediate answers to the many inquiries on our two Facebook pages. There are questions that concern the whole Echo Organization. That's what the switchboard operator knows best, because they get questions all the time. They can connect a citizen's inquiry to the right person. They probably use about 10 seconds on what we spend half an hour doing, because we do not know who has the answer right away. So we have to do a lot of detective work, to find out where we should redirect inquiries.

Official administration of Facebook can turn into an organizational answering service, rather than being a platform for dialogue and collaboration. The BG members have been aware of this matter for some time; it is something they learned early on. In response, the BG members have attempted to transfer parts of the administrative responsibility of the two Facebook pages to other departments, to those sitting at the front-desk, while online traffic concerning media and communication matters still remains a responsibility of the Communication Department. This means that implementing and appropriating Facebook into the Echo Organization's portfolio has contradictory outputs. The organization should have Facebook pages, but as the assignments and responsibilities it produces emerge, one tries to make other departments accountable for organization and maintenance:

- I-3: On paper, we're not responsible for all the official municipal Facebook pages. That's the Manager's responsibility at each department. But we try to keep up and stay updated, of course. If something happens on a Facebook page, we'll initiate contact and try to respond to the inquiry. And, yes, we believe this is a good solution. We shouldn't be responsible for answering all inquiries, as those with the professional knowledge should perform this task. For example, I'm not the most qualified to give good answers about admission to kindergartens. If I had done that, I could give wrong answers. However, those working in a kindergarten, they know and have the professional knowledge. They know their target group. That's why we have chosen to do it that way. That's how the Echo Organization is organized, a giant bag, but we have many different separate target groups. It's not likely that a citizen will be interested in all municipal services. Therefore, we have different Facebook pages, so you can follow exactly what you are interested in.

The experience of the BG member suggests that a potential practical and beneficial way to organize and maintain a manageable Facebook use for employees and citizens is to adopt to the logics of organizational decentralization and target group thinking. In a sense, if an organization's Facebook use and communication is to be compatible with how citizens use Facebook, this requires change of established user patterns and adoption of new ones. A citizen's Facebook use should be tailored to the specific external municipal *services* and personal *interests*, rather than following *all* the services the Echo Organization offers on Facebook. This is required because the Echo Organization is a considerable *large* organizational entity and it is demanding to have a complete overview for any user. If a citizen therefore follow their specific interests for a municipal service, he or she is more likely to be redirected to the right competence and have a more positive user experience. If not, this can make organizational Facebook administration unmanageable and lead to the challenge of information overload.

On the other hand, this experience raises the question to what extent the Echo Organization's ambition of making social media a collaborative platform for professional interaction with its citizens is practically realized. Here, there are challenges in creating an ongoing external dialogue. The BG members often have to take the initiative and write updates to create online conversation. The BG members have to take on the role of "pusher" and author updates. And there is often a clear assessment on what type and how much digital content can be shared. One often struggles to find the "right formula" on the proper amount of content that should be published. On both Facebook pages, we can observe a wide range of news stories on activities happening in the city where the Echo Organization is located and stories concerning the public organization in itself. The Facebook users often respond with brief enthusiastic and positive comments and likes, while other users upload pictures. But the BG members sometimes need to perform the role of moderator and exercise editorial control. Certain commercial actors tend to use the Facebook pages for marketing purposes and publish advertisements. This digital content is continuously deleted by the BG members. This means that Facebook pages often act as a *public bulletin board*:

- I-3: We want our Facebook pages to act as a collaborative platform, but they act as a bulletin board, especially the Facebook page representing the Echo Organization. We seldom get any online interaction there. Perhaps it's the way we write our updates, what we allow, what people are willing to share. There are not so many users who visit our pages and interact there. We want to achieve that goal, but we're not there yet.

Although there are challenges in creating a collaborative platform and online engagement on Facebook, the BG has met other barriers elsewhere. These are reflected in recursive attempts to overcome the internal organizational skepticism on adopting Facebook, as it is perceived as incompatible with the institutional practices and logics in the Echo Organization. This skepticism manifests in various ways. For example, colleagues can raise concerns that online socializing does not harmonize with the expectation of a public organization and that one should not spend work hours on managing municipal Facebook pages. Consequently, the female BG member has argued repeatedly that her colleagues and managers should approach the medium more seriously, as it can be used to serve the Echo Organization in positive ways. Facebook creates possibilities to work with public relations and can be applied to boost the positive status of the city municipality. Facebook can be used for public reputation management and organizational branding, but also to engage and work with public criticism of the Echo Organization.

The female BG member believes that Facebook adoption is exaggerated, because employees believe they will be overwhelmed by a vast amount of inquiries from concerned citizens. Often it is the other way around. The BG members receive perhaps one or two inquiries a week, so that the work is minute. Moreover, public criticism on social media is rare. The main conundrum is to boost the popularity of the Echo Organization and create conditions for online participation, something that is difficult, as Facebook users tend to limit their online participation to “likes”. This involves being confronted with becoming a creative content producer, which can spark interaction:

- I-3: I login on Facebook each morning. I see if anything has happened. Nothing. Then I do other things. Later in the day, I take a look if anything has happened. Nothing. I do some other things I have to do. If it’s a quiet day, I go onto the website and see if there’s anything that might be of interest that we can publish. If we have it, I put it out right away. We want to publish more, we want to add more. I try to figure out something that we can publish. I work with it. If there’s a question, I usually don’t know the immediate answer. I write a question on Yammer, so that everybody [internally] can see it. I then get answers that help me to respond on Facebook. It doesn’t take much time and the administration on my part is little, really.

Phase 5: 2012 – Becoming educators

Table 6.7 Key words in spring 2012.

Period	Key words
The spring of 2012	Yammer, Facebook, Twitter, Co-Tweet, DestoryTwitter, TweetDeck, MSN Messenger, Google Talk, Lync, eDialog, “Relations platforms”, gardening, #SoME, “pointing media”, “medium of the moment”

The spring of 2012 marks the final stage of the BG’s work. The members use personal reflection and retrospection on their actions and practices to work with social media in a different way. This is done as a response to a pressing demand from their colleagues – they wish to learn more about social media. To respond, the BG takes on the role as educator and organizes training sessions. This means that the considerable efforts they have put into strategy work is used for internal training.

The BG members continue performing certain activities, as they have done the last four years. They still review new social media services and provide interpretations of them. For example, the members familiarize themselves with old and new chat programs, like MSN Messenger, Google Talk and Lync. But the BG’s reviewing concentrates on three SNSs: Yammer, Facebook, and Twitter. Here, the BG teaches us about how we can use software enabling the possibility to communicate and combine streams from different SNSs, like CoTweet and TweetDeck. The BG members adopt and reintroduce new ways to talk about using social media too, as a resource to use and extend one’s personal online social network. Microblogging services can be seen as a “pointing media”, as Twitter is full of interesting people and links to useful resources. They see Twitter as a *medium of the moment*, which implies that tweets can travel with high velocity. Tweeting is closely tied to situations taking place “there and then”. Further, we learn that Facebook can be used effectively to develop specific communicative strategies. If a public servant knows his or her target group, this raises the odds of having a successful official municipal Facebook page.

The BG performs a status analysis. The goals for 2011 were many. They conclude that the BG has become a leading competence center, widely recognized by their peers beyond the boundaries of the Echo Organization. And they have harvested their success on that; the members have been invited to authors a chapter in a book dealing with social media, which is to be based on their work and their academic paper. They have been key speakers at internal and external workshops and conferences. But their impact within the Echo Organization is multifaceted. They have become known among coworkers. But the BG redirects their attention concerning testing of social media tools, which is a “hot potato”. The top management has communicated to them the need to downplay the role of testing of social media. Instead, the BG’s role is to be an “adviser” or “sparring partner”. This sounds good, but the BG disagrees. The BG is afraid that if their role is only to write recommendations, it could lead to being down-prioritized. And this has happened. To counter it requires an act of formalization of social media into the Echo Organization’s apparatus and allocation of resources. And the formalization of the BG is challenging. They have support from their middle managers, but obtaining the final approval from the top of the municipal hierarchy is difficult. Their mandate has not yet been approved and it is difficult to get a meeting with the BG’s steering committee. Many questions are unsettled, like their future development and if they are going to start to work with “new media” and leave the domain of “social media”.

On the other hand, we learn that the BG works to an agenda, as they have a *strategic priority area*. They embed goal-thinking management into their planning. They set goals defined by quarters of the year, which are broken down to be fulfilled on a monthly base. For the first quarter of 2012, they plan courses for training of colleagues in social media use and the Echo Organization’s guidelines for social media. The BG identifies that the Echo Organization’s many kindergartens and health stations need help to engage on Facebook. Blogging resurfaces as a theme too. The BG members are going to teach kindergarten staff how they can create blogs and tell about their work. But they observe that their closest managers seldom post new blog entries on the blogs the BG members created for them. The BG’s blog is now under the formal administration of the Communication Department. The BG is considering creating a blog for the Echo Organization. The SNS Yammer is also an issue, which they have worked extensively with. Yammer will become the Echo Organization’s new internal microblogging service. At the beginning of 2012, the BG also recruits a new member, enlarging the group to four permanent members.

Over the years, the BG members have been key speakers at many workshops and conferences, which has allowed them to e-mission their knowledge on social media. This has allowed the BG to frame a story of the definition of social media and the genre repertoire they have developed. The BG members have addressed this story to peers and a presentation is used to convey it, but modified according to the audience they address. The story follows a basic template. First, we learn about who they are, or their professional identity. The BG works with testing social media tools and acts as sparring partner in the Echo Organization. They are experts on “#SoMe” and monitor what happens in the social media landscape. They have developed communicative strategies for social media fitted for use in public organizations and “cracked” the code for social media guidelines an employee can use. Second, the BG explains social media’s ontology. Social media is “relation platforms used for user-generated content” and consists of many social media services. And of course, social media is a challenging topic. They stress that the technical side of the technology is *not* the important aspect of learning for a new user, but using them has benefits. By, for example, participating in an online dialogue, an employee can build a personal network and get connected to a pool of ties and resources. Moreover, one gets access to an interesting audience. The most important argument on “why”

an employee should engage on social media, however, is that the citizens a public organization serves are “out there”, on these platforms. Logically, as the citizen is there, public organizations should be there too. Third, the story focuses on how online engagement can be created, structured around telling the experiences from practical examples and by asking a set of “*what*” questions. The BG asks *what* an employee can use Facebook for, *what* people talk about on social media, *what* you as a public employee can do with it, *what* does it mean to succeed, or *what* has the BG done with social media in their own organization, for example. Fourth, the members explain that the potential solution to all the “*what*” questions can be solved by applying “*how*” answers, meaning that the communicative strategies for social media use in an organization can come to their proper use. Social media challenges can be overcome by applying and shaping one’s user pattern within the boundaries of the guidelines and by having a defined target group.

Becoming instructors and educating peers

From March to June 2012, the BG organizes a series of internal training courses in social media. These are aimed at colleagues, who experience that social media influences their workday and work practice. The courses are organized as half-day seminars occurring once a week, spread over a longer period. The courses have overlapping, but dissimilar contents. Certain courses in February and April have only basic introduction to social media and use of Yammer on the “syllabus”, while the lessons in May and June extend the course material to include use of Facebook and Twitter. The courses are endorsed on the Echo Organization’s intranet portal and become fully booked. Some of the courses have waiting lists. The BG members experience them as a success, but just before one of them starts, there are dropouts. The courses are not “academic” but designed to be framed as “hands-on”, involving a focus on practice. For the members, this allows them to present the outcome of their extensive knowledge production process in an educational and organized setting. They have self-designed the course material. This is the informal organizational social media literacy, perhaps, which is a remix of selected web culture influences, the Echo Organization’s goal-thinking management, and sociological theory on social capital, social networks and new media.

The training courses are a venue where the BG members narrate their version of social media’s ontologies. This allows the BG the opportunity to explain their interpretation of social media. This is also one of the first times where the members can systematically disseminate and work with creating a shared organizational meaning of social media and motivate colleagues to change their communicative practices from one-to-one to many-to-many. The BG works with crafting an understanding, which emphasizes the message that colleagues can change their work practice from e-mail and “(U:)” to include a variety of beneficial social media services. This means to leave the *private* and *individualized* way of communicating to engage with the new open Internet computing paradigm, which suspends the artificial boundary between information and communication tools. In this regard, the members use their definition of social media and the genre repertoire to educational use. The variety of words, expressions, and symbols, which play on the rich cultural language that favor and bring out the affordances of the Internet culture that the BG has modified to the institutional practices and logics of the post-modern bureaucracy’s organizational apparatus is addressed in a face-to-face setting.

This aspect is outlined in a story, which is reused while performing what the BG calls “gardening”, a practice for creating and cultivating legitimacy for their work in organizational life. In the same way as teachers use the chapters in a textbook to structure and organize the progression of their classes, for example, the BG does more or less the same. They use a core presentation to teach colleagues about how social media can be applied for external and internal

communications, which is modified according to the audience. In a way, they have an informal “textbook” to train colleagues in social media use. The courses are practically organized and held in the many computer labs in the Echo Organization used for internal training. Many course participants are in their late 40s and 50s, especially senior female employees, a user group assumed to be skeptical and not skilled in social media use. The course participants work across the entire Echo Organization, but have signed up because the clients they serve contact them or are on social media, meaning that they attend the courses to learn about internal and external communication.

Figure 6.6 The BG presents its definition of social media.



Considering the content in the courses, there are recurrent features. First, all courses start with the BG members introducing themselves, before the participants do the same. The members are curious to why the participants have signed up. They attend because they want to upgrade their competences. Many are skeptical of social media and their previous user experience is limited to Facebook use and e-mailing. Second, the BG members set out to explain the larger picture behind the structural changes in the social media landscape and how this influences organizations and work. This is done by connecting their story to larger ideas, symbols, and pictures that frame social media properly. Bill Gates, Mark Zuckerberg and Steve Jobs, for example, are agents of American innovation and proponents of the larger changes we are witnessing. Third, we learn that each session is organized by having a set of learning goals. Each course participant is to be given a basic understanding of what social media “is”, which is often referred to by the hashtag “#SoMe”, an abbreviation of “*SO*cial *ME*dia” used in the Twitter language. The BG members also present their definition of social media, “relation platforms based on user-generated content” (as shown in Figure 6.6). The BG members are interested in explaining that social media is more than just Facebook. There is a wide variety of platforms to choose from. Certain social media services are explained as having advantages, but the BG points out that online participation has certain risks and coworkers need to be wary of them. The participants are to have practical exercises. One is to teach them how to deal with the distortion that social media produces. Coworkers are briefly introduced to the popular cognitive mediation technique, “mindfulness” and “selective attention”, which has become a popularized mental technique to deal with information overload. The YouTube video with the “Invisible Gorilla Test” is widely used as an example on how future users must train themselves to filter non-essential information from their social media use, when engaging with the web’s participative culture (Chabris & Simons, 2010). The Invisible Gorilla Test video challenges

viewers to count the number of passes of a basketball between players with white and black shirts in silence. At some point, a gorilla strolls into the middle of play, faces the camera and thumps its chest, and then leaves, spending nine seconds on screen (as shown in Figure 6.7). The video is screened on all the courses and the participants are asked if they see the gorilla.

Figure 6.7 “The Invisible Gorilla Test”: YouTube video.



Fourth, a central message in the BG’s story is the claim that social media is a reflection on general changes taking place in society at large. This means that changes in the social media landscape influence organizational life and work practice in new and unexpected ways. To substantiate this claim, the BG has looked to the IT management literature for support. Here, research shows that a vast majority of American employees in corporations increasingly bring their “private social software and user habits” to work, software that is not officially approved by organizations. The BG members have found surveys claiming that 47 percent of all technology users in American corporations use one or more web sites not approved by their employer to complete their job. In other words, the BG’s point is to show that social media is illicitly diffused and imported onto the organization’s turf. This causes a “convergence” between private social media user patterns and work practices. These conditions push forward the increased need to learn new themes in the work place, furthermore, to acknowledge that knowledge workers must be ready to become professional learners, making organizational learning a novel priority on the local agenda. The BG members tell that certain actors take advantage of and adapt to this work situation, the so-called “smart worker”. This rational actor has eight attributes: (1) aware of learning all the time, (2) will immediately have a solution to their problems, (3) shares their knowledge with others, (4) always trusts and depends on a social network of friends and coworkers, (5) has their best learning with and from close ties, (6) is updated within their professional field, (7) always works to be more productive, and (8) personally grows by being self-organized and using the autonomy their work offers. The BG injects another recursive theme into their story about the “smart worker”, which social media key speakers use when addressing social media and work. One of these is the so-called “Joy’s Law”, which states that, “*No matter who you are, most of the smartest people work for someone else*”. This metaphor implies that no matter how “smart” a worker considers him or herself,

there is always another “smart worker” elsewhere one can contact. In this regard, the BG links this metaphor to a recurring challenge in resource management of organizations; when it has grown too large and complex, it can become difficult to manage and have a complete overview. The BG members use the iceberg as an analogy. From a distance, you only see its peak or the uppermost 20 percent, meaning that beneath the surface there is 80 percent of resources that can potentially be used. The smart worker will attempt to find these hidden resources in the organization. And one way of doing so is to use informal networks embedded in social media, as such ties can lead to the resources the smart worker is looking for. This strategy can reduce internal organizational barriers between departments. But to succeed in this way is never easy, the BG stresses, as the larger theme behind it is to engage with organizational culture and build trust in professional social networks.

Fifth, the BG members redirect their attention in the story. The BG is now interested in showing colleagues that there is a variety of social media services, which can be used for bonding and bridging with new colleagues in the Echo Organization. They want to indicate that there is a variety of social media services suitable for solving and performing different tasks. Certain social media tools can be applied to improve productivity at work. Doodle, YouTube, bubble.us, Skype, Chatzy, and Google, for example, are classified as “team based”, while Evernote, Firefox and Google are custom-made for personal interactions. Other social media platforms are appropriate for retrieving and sharing of information. Google and Wikipedia can be used to find interesting resources, while GoogleAlerts, GoogleReader, and RSS are for staying updated on current events. Other social media services can be used for storing and sharing of content. GoogleDocs, PBworks, and Wikipedia, are web-based software that can be used to collaborate on distinct topics. SlideShare, Vimeo, Prezi, Flickr and Audacity can be used to share URL links, resources and ideas. Twitter, Facebook, LinkedIn, Google+, Yammer, Ning, can be for sharing and networking. In sum, the BG members argue there are “eight big social media platforms”: Google+, Facebook, Wikipedia, Yammer, LinkedIn, Flickr, YouTube, and Twitter, which can potentially be tailored to comprise an employee’s social media user pattern.

Sixth, to conclude the BG’s story, the use of these social media services must respect the importance of *netiquette* and what role performance an employee wishes to create and perform him- or herself, when engaging in the social media universe. The BG argues that engaging on social media has advantages and pitfalls. And many will make *errors* when communicating online and one has to learn from them. To safeguard oneself from the risks of social media, the BG advises colleagues to read and follow the Echo Organization’s guidelines for social media use. By following them, an employee will be fine. But there are positive aspects to using social media: sharing can reduce the internal barriers claimed to exist in organizations; it allows information to travel fast and be distributed to many; workers can be better equipped to help each other; social media can “humanize” or “demystify” managers; social media can make the flow of information non-hierarchical; social media can make workers more productive and less dependent on geographic location; it can make one’s talents and competences visible to others; and social media can be a virtual “water cooler” allowing connection with coworkers. The BG members are eager to create an awareness that social media has many challenges, especially when trying to apply it to smoothen the flow of internal communication in the Echo Organization. Here, the barriers need to be overcome, with several factors at play: for example, colleagues may not listen to each other; they may refrain from sharing; people do not find what they are looking for on social media; some knowledge is too complex and is non-transferable; certain social media tools are not “social enough”; and social media is merely a channel for distortion and distracts workers from their work.

Figure 6.8 Slide from training course “You will fail”.



But there are ways to succeed. The BG argues that, mastering the art of sober socializing is a path to follow. And by adopting parts of the BG’s “external channel strategy” into your work practice, you can manage your online impression management regime on social media by “listen, share, and to be relevant”.

The experiences of being educators

For the BG, addressing social media for approximately 60 colleagues is an accomplishment. The self-initiated activity has taught the BG that the courses are more important than they initially imagined. They have been able to reach a social media user group, which is normally slow in adopting new technologies into their work practice:

- I-1: Tutoring is more important than you believe. It’s essential to include the large group of people. We’re good at reaching the early adopters in the Echo Organization. They adopt. But to reach the large majority of ordinary employees who don’t start using new technology instantly, we had to go out and train them. That has been made very clear to us.

This observation leads the BG to point out that early adopters are perhaps more prone to being self-organized and adopting new technologies by taking the initiative themselves. The early or late majority of technology users in organizations follows another path and rely more on other means to boost their personal technology competencies. They prefer to use organized training sessions offered by the organization itself, which can be interpreted as being dependable on institutional practices to adopt technology. On the other hand, the BG members have sensed an internal demand among colleagues for social media courses, but it is difficult to pinpoint why they hit a chord. For example, the BG members advertised them sparsely on the Echo Organization’s intranet. The BG assumes that the popularity of the courses spread by word of mouth by mouth. This means that the many presentations at workshops and conferences and visits to neighboring departments have created recognition and activated the flows of communication on the “the jungle telegraph”:

- I-2: We noticed that it had somehow spread. The first time we advertised all the social media courses, they were fully booked in two hours.

But many factors contribute. Colleagues attend the courses for obvious reasons; they are uncertain how to use the variety of social media tools technically and practically and need guidance on how to use them and for what purpose. The most evident explanation is because of a growing organizational need to fill a knowledge gap. The BG speculates that employees have been encouraged by their managers. This means that social media now has support in the management structure, which the BG sees as positive:

- I-2: They've been at gatherings for municipal managers. And there they talked. Someone has talked to someone who's started using social media. Then there is a thought, "We have to do the same at our department". My impression is that someone has been a bit stressed and freaked out. They sit here and there and they don't know where to exactly start. And then they attend a social media training course, because they've realized there is a value, meaning they're not completely unconscious when someone asks why they're on Facebook.

This marks a new direction and a boost in the social credibility of the BG's work in the Echo Organization. Their work has exceeded internal departmental barriers. A couple of years ago, the BG members had to *contact* peers to talk about social media. The BG had to be proactive to draw attention to a matter they regarded as important. Now, the situation is reversed. The user group the BG wanted to "turn" to become permanent social media users, contacts them. Consequently, this means that the early focus on the conditions for "*ildsjeler*" or technology enthusiasts is downplayed:

- I-3: Now, this technology enthusiast focus is not so evident, because they have formalized their work into the departments where they work. The technology enthusiasts have been people like us. People who only start doing something, taking the initiative. They made contact, but now there are more managers who realize that they have to do something and approach social media. And they've contacted us. And this is positive.

The BG's courses have a clear subtext, aspects that become sharper when seen in relation to how other actors in other organizations arrange their social media courses. In a sense, the BG is not the only actor taking on the role of educator, as internal training of employees in social media is a widespread trend in organizations across the country. The BG's experience is that these courses often have too strong a "tool focus", which implies emphasis on teaching colleagues user interface and the technicalities of social media. In addition, the BG members sense that colleagues in other organizations are inclined to institute mental barriers preventing adoption of social media. They may hide behind the rules and regulations of the organization's "bureaucratic paper mill", arguments that in reality serve to uphold established work practices. This represents a narrow approach to implementing social media in an organizational context. In this regard, the BG members have attempted to create a different focus in their social media courses. They systematically downplayed the "tool focus" and instead wanted that their colleagues to *test* the variety of social media and learn to create *communicative practices* to engage with peers in an online dialogue within and beyond the boundaries of the Echo Organization:

- I-2: There's a different focus. It's not about what range of tools I have on my PC which matters. It's not entirely appropriate to start there, I believe. It's more a

question about communication and how we can talk better, how we reach each other. You have to have something to pass first. There's little point listening to 100 different channels, if you don't have a dialogue.

The larger "plot" behind the social media courses is challenging the Echo Organization's organizational culture. Moreover, there is a goal to engage with the much feared IT silo mentality, which is assumed to dominate the flow of internal communication:

- I-2: My impression is that many departments in the Echo Organization have their own culture, in a way, framed around "This is how we work here". It's like, "This is the way we have done it here, and we should continue to do it that way". And you have the slogan, "Better in ring binders than on screen". It says a bit about where you work digitally.

To approach the IT silo mentality and organization culture, the social media courses aimed to motivate colleagues to engage in the microblogging service, Yammer. To work with that, practical "hands-on" exercises on how to use Yammer was part of the course material. But Yammer had a different role in the Echo Organization, before it emerged as the internal SNS. Yammer was first loosely adopted as part of the BG's testing practice. In February 2009, certain BG members registered and started engaging on Yammer. But they soon abandoned it in favor of Elgg. At the same time, colleagues in the Communication Department started using it more systematically, as part of a technical back-up solution in case of a crisis situation in the municipality. This has meant that Yammer has been used regularly. The BG later redefined Yammer's role, as it now could be used to enhance internal communication and bring down internal barriers. But as part of that ambition, other strategies are needed, as one cannot technically implement a SNS and hope that users start to engage. That is only a prescription for failed technology adoption. One needs other strategies to build a critical mass of SNS users. Someone must go out at the front and "pull" and "motivate" others to join the online community. The BG members have framed this practice as "online gardening". Online gardening is an "imported" metaphor that plays on the logics of ordinary gardening. BG's analogy is that in order to have a thriving online community, someone has to plant the seeds and add fertilizer and water, actions that are essential for the critical mass of users to expand and engage into a digital culture. The BG has solved this by sharing content, commenting, "liking", and posting written status updates on Yammer. And this has to be performed continuously to make an online community sustainable. The BG's online gardening has paid off; as of June 2012, they had managed to get 1000 of the 13,000 employees in the Echo Organization to register and engage with each other.

Here, an important ambition with the social media course has been to motivate and prepare colleagues to enter into the online dialogue on Yammer, enabling them to perform connecting strategies and bond with colleagues:

- I-1: The most important message from the social media courses has been relations, dialogue, listen, sharing, and to be relevant. And it's not about the tools, it's about organizational culture. And after we took the university course, for example, we started to understand the aspect about ties and social networks. We started to work differently and got a framework. We saw the meaning and importance of in-groups and out-groups traits, the network concept. Now it's all about networking and connecting with people. We've understood that it is not about technology, but social relationships. This can be created through communication and interaction. And in continuation of that, what kind of communication and actions can be created elsewhere? To create relationships, we came across another subject here, that this can be achieved by small talk.

6.5 Summary

The intention with this chapter has been to examine the dissertation's third localized model, *relation platforms*. The case story examined a bottom-up initiative on how this model was embedded and socially constituted into an organizational context, showing how employees in organizations work professionally with social media and build competencies around it. This has been analyzed by looking at the work and the history of a group of colleagues who formed a social media competence group, called the Beta Group, in a public administration managing a large city municipality, which I called the Echo Organization. I have tried to chronicle the creation and outcome of a knowledge production process, showing the various ways in which the BG's members created their own definition of social media as "relation platforms based on user-generated-content". This understanding has been the result of the BG's self-initiated research, experimentation, and reflection on their own practice and use of social media, which has been subject to changes as the group members have interacted with ongoing municipal priorities, goals, and activities in the organization where they work. Relation platforms consist of symbols and expressions adopted from contemporary web culture and are part of a wider genre repertoire on how employees can use and embed social media into their work practice, forming an organizational literacy on social media. This argument was covered over the chapter's five parts. The first part tried to frame the model by connecting it to appropriate theoretical concepts used in organization research to explain the formation of communicative practices in online communities in organizations. This was done by discussing the terms *genre* and *genre repertoire* with perspectives on how professional practitioners create knowledge and understanding by reflection on their actions and experiences. The second part outlined a current tendency in Norwegian organizations, showing how private and public organizations manage social media in professional ways, which was illustrated by the rise of social media competence groups, the *betas*. The third part presented BG's organizational affiliation and current crew. The fourth part analyzed distinct and significant events in the BG's history, which have played an important role in the knowledge production process leading to their understanding of social media, covering the period from the fall of 2008 to the spring of 2012. The implications of the findings are discussed in the final chapter.

7 The 2.0 Social Intranet Portal

In 2010, the top management in a public administration or county authority (CA) – called the Lima Organization – took the initiative to implement a new intranet. This consisted of upgrading its older intranet and turning it into a social intranet by embedding a variety of technical features enabling information sharing, modeling it to be similar to an internal professional enterprise SNS. This was acquired through a public procurement and was organized as part of an internal project in the Lima Organization. The objective was to improve internal communications, simplify employees' work surface, escape e-mail burden, and contribute to bridge gaps across internal organizational boundaries, as part of a goal to bring organizational change and development. Also central, however, was the promotion of an organizational discourse stressing the importance of *sharing* content on the new social intranet and legitimizing a *sharing culture*. This implied that employees needed to be encouraged to change communication and work practices, by transferring private work interaction from e-mail increasingly to share work and communicate on the social intranet. Although technical implementation went well, the top management later experienced that sharing was not occurring at an expected level, as a large part of the Lima Organization's employees were reluctant to engage in it.

To analyze a side of this situation, I track how the initiative is interpreted and what meaning sharing and sharing culture acquire, by using a top-down perspective. The case story attempts to show how embedded ideas about social media socially constitute and translate into an organizational context. This creates the dissertation's fourth local model, the *2.0 Social Intranet Portal*. This is shown by analyzing the user experiences of the dissertation's fourth actor, a group of employees holding different positions in the Lima Organization. I pay attention to their different involvement in the implementation of the social intranet and how they negotiate boundaries and define their role performance. I pay attention to how the employees interpret the social intranet and the meaning of sharing and how they relate that to their use of the new social intranet. To show this argument, I cover it across the chapter's four parts. The first part relates my model to theoretical concepts in organization studies used to understand how users interpret implementation of technologies in organizations and to anthropological research that has examined the meaning of boundaries. The second part seeks to contextualize how the initiative is part of tendencies seen in Norwegian organizations, showing how organizations look to the social media landscape for inspiration, when designing social intranets. I outline how this served as a premise behind the top management's measure. The third part considers the user perspectives of the implementation, which is portrayed in personal user stories. Here, I explore the employees' interpretation of the social intranet and their understanding of sharing and role performance. Each theme is also linked to a domain that characterizes the larger interpretations the informants made about the social intranet and the meaning of sharing. The last part summarizes the chapter.

7.1 Part I: Orlikowski and Gash's *technological frames* and Barth's *boundaries*

To frame the *2.0 Social Intranet Portal* theoretically, I return to the early work of Orlikowski, which she completed in collaboration with Gash.¹⁹ In 1994, Orlikowski and Gash introduced "technological frames", which is defined as

¹⁹ The model's research perspective is outlined in Chapter 3.

that subset of members' organizational frames that concern the assumptions, expectations, and knowledge they use to understand technology in organizations. This includes not only the nature and role of the technology itself, but the specific conditions, applications, and consequences of that technology in particular contexts. (1994:178).

The term emerged as a response to focusing on the role of *frames* in the Information System research literature. This research stream had until then concentrated on values and perceptions, but overlooked how users interpret and made sense of technology to determine action. Orlikowski and Gash argued that there was a need to develop a perspective that studied users' "taken-for-granted" notions, as one lacked analytical tools to understand "the interpretation that people develop around technology" (1994:175).

The concept aimed at putting greater emphasis on what role *interpretations* play, when humans decide to use technologies. This focus could help researchers to understand how people develop particular assumptions, expectations, and knowledge of a new technology in an organizational setting. To develop it further, Orlikowski and Gash turned to the social cognitive research trajectory (Berger & Luckmann, 1967; Smircich & Stubbart, 1985; Weick, 1979b). This research theorized that individuals act and interpret the world around them and fill it with meaning and enact particular social realities, creating cognitive structures that can be shared with others, so-called "frames", which are implicit guidelines that serve to organize and shape people's interpretation of events and organizational phenomena and give these meaning (Moch & Bartunek, 1990; Weick, 1979a). Central to this argument is sensemaking, which involves how people interacting in organizations will interpret the great variety of tacit, explicit, and ambiguous impressions around them to structure and organize experience (Gioia, 1986). Orlikowski and Gash established that such frames can be shared, as certain groups of individuals will share a common belief and be part of a community (Porac, Thomas, & Baden-Fuller, 1989). This can take different forms and create conflicts of interest (Van Maanen & Schein, 1979). Orlikowski and Gash established that the social cognitive research trajectory had not paid particular attention to the role technology plays in this regard. To counter it, they turned for inspiration to the sociological literature on collective cognition and social construction of technology (Bijker et al., 1987; Henderson, 1991; Sætnan, 1991). Here, Orlikowski and Gash argued that this literature saw technology frames as "the understanding that members of a social group come to have of particular technological artifacts, and they include not only knowledge about the particular technology but also local understanding of specific uses in a given setting" (1994:178). Technological frames are argued to be powerful, as they can influence how people choose to interact and adopt technology into a work process. Moreover, you can expect that different groups in an organization could develop different interpretations of a technology, implying that any researcher can find different expectations on intention and use of a technology.

Orlikowski and Gash (1994) were interested in analyzing the meaning of *incongruence* in technological frames across social groups in an organization. They argued that various groups in organizations could have similar expectations around a technology, meaning congruence over specific things. Incongruence implied significant differences in expectation, assumption or knowledge about some key aspects around a technology. To illustrate this, they turned to the implementation of the groupware Notes in a consultant company. They interviewed the implementers of Notes and end users, whom they grouped into "technologists" and "users". Technologists referred to technology staff, while users were the organization's consultants. Interestingly, Orlikowski and Gash demonstrated large differences in expectations and actions, which they explained by the differences in technological frames. The technologists viewed Notes as an enabler for information sharing, electronic communication, document management

and online discussion, which they believed could contribute to collaboration. The users had a different interpretation, as they recognized Notes's electronic e-mail features and saw it as a potential substitute for existing communication technologies, like fax and phone. This involved the technologists framing Notes as a *collaborative* technology, while the users saw and used it as a means for *individual* and *personal* communication. Orlikowski and Gash found other differences. The technologists and users had different interpretations of Notes's potential impact factor on the organization. The technologists believed that Notes could transform the organization as a whole and bring organizational change, while the users thought it was part of a strategy to improve communications. Furthermore, the technologists viewed Notes to be "end-user based", assuming that the consultants would adopt, learn it quickly, and develop new work routines around it. The users saw it otherwise, as they had difficulty in understanding its features and lacked knowledge on how Notes "worked".

Although the theory of technological frames is an outstanding piece of academic work, I take interest in using and complementing it with other theoretical ideas, which have been addressed in social anthropological studies of *ethnic groups and boundaries*. I am interested in this because I wish to account for what role the meaning of ongoing negotiation of *social boundaries* play, when user groups construct and interpret assumptions, expectations and knowledge of a new technology in an organizational context. This can be argued to happen in social interaction and is linked to social situations. This is an aspect Barth (1969) theoretically outlined, although the role of technology is never considered in his classic work. In the 1960s, Barth challenged the notion that the social organizing of tribes and people was constituted by formal traits like customs, geographical factors and dressing patterns, but proposed instead that actors define their ethnic belonging by processes of self-ascription and ascription by others, foremost by using social boundaries to construct identity. This led Barth to conclude that ethnic distinction depended significantly on understanding the social boundaries manifesting in social interaction. My interest lies in relating this dimension to Orlikowski and Gash's concept. I do this because we often observe this pattern, as technology users tend to negotiate social boundaries and define the performance of their roles in relation to it when they interpret a new technology in an organizational setting. This is an argument I will demonstrate in the following sections. This aspect appears to be important in my material too, and is especially relevant when actors draw on past user technology patterns, experiences and organizational affiliation, when they decide to adopt and engage in a professional SNS. The question of social boundaries is particularly at stake when actors consider the question of sharing an item in an online community, as it is often an individual question on crossing such boundaries or not.

7.2 Part II: Organizations and social intranet

From the intranet's early inception in the 1990s, the term has implied an intimate institutional arrangement between organizations and Internet Protocol computer network technologies. The use of the term entails setting up institutional boundaries, foremost between "the internal" and "the external" side of an organization. This implies that to have access to the former requires organizational affiliation. Intranets are used to serve a variety of purposes. They are commonly used for an organization's internal web site. Intranets have a long track record of being used to bring network technologies and organizational members closer together, like being a reservoir for storing organizational knowledge, as they have often served as *knowledge management systems* (Davenport, 1994). This can be knowledge repositories, group-decision support systems, expert systems, etc. This assigns them the possibility to enhance an organization's operational capabilities, like increasing competitiveness or improving innovation. Recently, one has started viewing intranets as possessing conditions that are now associated to the logics of what McAfee (2009) calls *Enterprise 2.0*. Intranets are coupled with having the similar logics

and capabilities that social media platforms offer. They are put in the same category as SNS, bookmarking services, tagging systems, blogs, and wikis, meaning that intranet is now seen as a single network technology that can connect an organization's members on a much more personal level.

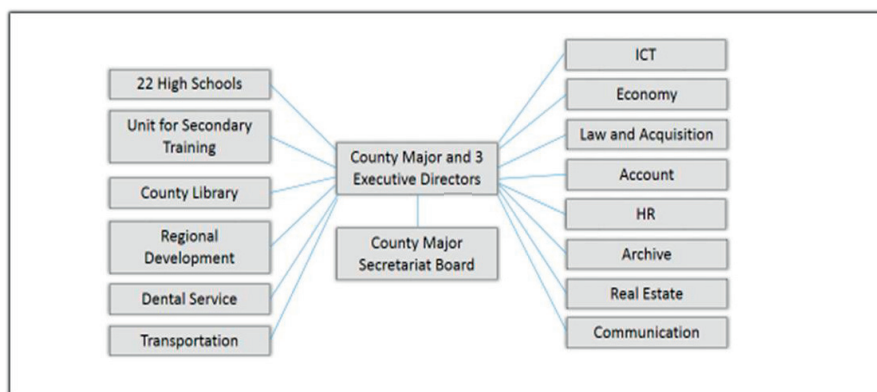
Since the 2000s, many Norwegian companies and public organizations have upgraded their intranets to become professional SNSs. Yara, DNB, the Norwegian Broadcasting Corporation, Norsk Tipping, Statens Pensjonskasse and the Norwegian Meteorological Institute have all replaced their intranets with what they call "social intranets". It is common to give them a social identity, as organizations name them, like NRK's *Torget*. The social intranets are implemented for various reasons. Top managers in organizations perceive their intranets as outdated and in need of modernization; there is a changing external context demanding internal organizational change and development. The trend is to simplify employees' work surface and create internal transparency; enable and improve coordination and information flow to work in the digital area; improve employees' competences; and to share knowledge. These reforms deal with internal organizational boundaries. This tendency is underpinned by a motivation of introducing new network communication models. One hears of visions to encourage workers to change their way of communication, abandoning the "one-to-one" to embrace the "many-to-many" way of communicating. While it has been common that a *few* employees in the communication department published internal news stories on an internal website, now it is desired to change this to a reality where *all* employees contribute to a breathing internal online community. To enable it, developers look to the social media sphere for inspiration for remodeling intranets to become SNSs, so that they can become platforms to build social networks and foster social relations among employees. Organizations create internal task forces for realizing this purpose. These are created as the direct result of a top-management initiative and organized as internal projects. They specialize in coming up with technical solutions on how intranets can be redesigned to include features commonly seen in SNSs. In many cases, these can act as blueprints for what organizations expect their new social intranet to look like. Organizational task forces are prone to explore user interface designs, which stress personal profile and embed functionalities that facilitate simple *sharing* of digital items and connections. This can include functionalities like news streams, lists of online connections, groups where digital items can be shared, embedding of widgets enabling linking with other internal computer services, search engines, tagging systems, chat functions and e-mail systems, all intended to create organizational conditions for better transparency, interactions, sharing, coordination, and cooperation.

7.2.1 The Lima Organization or County Authority

The Lima organization or county authority is a diversified and complex organization, covering the geographical territory of several municipalities. It has a population of approximately 300,000 inhabitants; 60 to 70 percent of its population is estimated to live in a metropolitan area. The County Authority consists of defined formal organizational structures, political, administrative, and a body of welfare units that serves the citizens directly. The political structure is an elected body, consisting of the County Council, the County Executive Board, the County Principal Standing Committees, and the Chairman of the County Council. The County Council is an elected body. The County Council is directly elected for a four-year period and consists of 37 representatives. The County Council elects nine representatives to form the County Executive Board, which meets twice a month to make decisions and recommendations on important matters. There are four sub-committees and the members are elected into individual committees that work with education, economic development, transport, and environment and culture, athletics and community welfare. The political structure is also made

up by the Chairman of the County Council or the County Mayor, who is the chief political representative. The County Council is supported by an administrative body, the County Administration, which implements and administers policies. The County Administration is organized into eight administrative units, which supports the County Mayor and three Executive Directors. The County Mayor and the Executive Directors have an executive secretariat board which assists them practically on a daily basis related to political issues, the County Mayor Secretariat Board. Eight department has supportive functions, which include ICT, finance, law and acquisitions, accounting, HR, real estate, archives and communication. There are other welfare units which have a more proactive role toward the citizens and can be classified as service producers. These consist of six units, covering 22 high schools, the Unit for Secondary Training, the libraries, the Unit for Regional Development, dental services, and transportation. The County Authority has about 2800 employees and the County Administration is located in a large city. The organization chart of the Lima Organization is displayed in Figure 7.1.

Figure 7.1 Organization chart of the Lima Organization/County Authority.



7.2.2 The backdrop for acquiring the social intranet

The background for acquiring the social intranet lies in the challenges top managers have to deal with in organizations. Some are basic, like addressing the need for continuous organizational change and development. Others are more challenging to overcome. In the CA's case, one is creating a sense of internal unity, so that its autonomous and decentralized units and employees feel they belong to a single organization. Sometimes it appears to be the other way around. Other internal factors can potentially contradict organizational unity. They can prevent intentions like improving collaboration, sharing of experiences, and enhanced organizational performance, etc. For example, teachers, a large profession, are assumed to identify with the *schools* where they work and with their *professional identity*, rather than identifying with and feeling they belong to the CA. Similar ideas of self-ascription and organizational belonging can manifest between departments in the CA too. It is not uncommon for employees to identify primarily with the department where they work. The CA has other management challenges. These are practical and deal with creating transparency and organizing practical arrangements, like having an overview of the competences and contact information of coworkers. Others deal with solving the big conundrum – which most communicating organizations struggle with today: escaping meetings culture, e-mail overload, and interaction in and across computer systems. In this regard, replacing the CA's old intranet with a new one was viewed as one of several means that could create a simpler work surface for all the CA's employees.

In 2010, the CA's top management started the work of acquiring a social intranet. This was initiated as part of an internal strategic work process. It was legitimized by the renewing of the CA's strategic ICT plan, which placed itself as one of several top management priorities. This was issued by one of the CA's Executive Directors. The work was organized as a project leading to the creation of a small task force and a large steering committee. The task force worked with it full time and was organized as a project group, consisting of four employees from the IT and Communication Departments. The task force was headed by an internal project manager. The steering committee consisted of top and middle managers from different departments. The task force reported regularly to the steering committee on their progress. The project group presented various drafts on alternative interface designs and attempted to integrate wishes and specific requests from various departments. The result of this work would be finalized in the organizing of a public procurement. The CA would invite potential contractors to answer the call. Moreover, they wanted them to suggest proposals on how to accommodate the vision of a new social intranet.

Before the announcement of the public procurement, however, the task force conducted a review of the old intranet. This identified shortcomings. Launched in 2006, the old intranet had been run as an internal website and administered after a Web 1.0 or "read-only" model. Content production and publishing were maintained by a group of intranet editors. A couple of colleagues from the Communication Department regularly wrote internal news stories. The task force found other shortcomings, which included: the user interface was outdated; it was hard to find the competence and contact details of their coworkers; one could not tag keywords; it was difficult to collaborate; it did not allow for Web 2.0 communication practices; it was organized around the principle of distributing information from one sender to many passive receivers; it did not take into account that the current way of communicating is based on sharing and a many-to-many logic; it had too many news stories; it was difficult to publish content; one could not personalize an employee's professional background; there was no possibility to add RSS feed and blog; it was not possible to define a target group, etc. The task force conducted an internal survey. More than 50 percent of the employees stated that they read news stories every day. The task force concluded that colleagues mainly used the old intranet to search and retrieve for information.

This legitimized the need for a new social intranet. And with it, emerged new organizational visions. These stressed that the CA should have a good culture for information sharing, which could help to make the organization's ambitions, goals, decisions, and activities known. This could be realized by embedding the CA's organizational values, which emphasized "to make each other better" and "to be groundbreaking". One envisioned that the new social intranet should be an important central point for information sharing and facilitate collaboration between colleagues, departments, and units. The social intranet should be the CA's new "melting pot". This meant crafting an internal organizational discourse of a good sharing culture, which stressed the wish to improve online interaction, transparency, and transaction of digital items. And when this was evaluated as absent and technically difficult to achieve by using the old intranet, the task force looked beyond its own turf to a place where this was assumed to breathe and grow – the social media landscape. Professional SNSs and organizational microblogging services had affordances the CA lacked. Professional SNSs were assumed to be symbols of successful platforms. Here, users interact and are part of an online community, as users publish, like, comment, and give feedback to peers. Users connect and maintain relationships with familiar and new ties, enabling communication across barriers. Moreover, users enact new communication practices that embody the sharing logics of the

social media world and the Web 2.0 “many-to-many” communication practice, not the outdated Web 1.0 “one-to-many” information communication practice.

To move the CA into the professional SNS era and facilitate sharing, a new social intranet would mean ending the monopoly whereby a few editors controlled content production, to construct a technology structure where many editors could communicate and connect by online participation. Doing so involved laying down new technical requirements. The task group authored a draft of the public tender document, which would invite subcontractors to submit proposals for potential new designs of the social intranet. The public tender document served as a blueprint for what the new social intranet would look like. The CA’s ICT infrastructure was built on a variety of Microsoft solutions and similar computer systems, implying that the new social intranet had to be congruent with MS SharePoint. The most important technical requirement was simplifying employees’ work surface and reduce e-mail overload. To achieve that goal meant changing the ICT work surface; before the social internet was implemented, for example, an employee would work across *several ICT tools*, which had to be open individually, meaning that an employee had several ICT systems open and running and information stored in many different places, making it difficult to have an overview. Instead, the CA wished the social intranet to be the *first* and *compulsory* ICT tool that an employee opened in the morning, when he or she started their work session. Ideally, when an employee clicked on a web browser, he or she should be automatically led to a personalized “my page”, containing a variety of SNS features enabling sharing and links to the ICT tools the employee would use to carry out his or her work, like e-mail software and office suites. The “first” page was to be the social intranet and should include common SNS features, like a quick publishing button, a newsfeed, a comment and writing status update field, an activity calendar, a section containing professional competences, a RSS feed, the option to embed Facebook and Twitter accounts, tagging options, a function to “follow” coworkers, and a powerful search engine. A central SNS feature viewed as important to create conditions for information sharing was to have so-called “rooms” in the social intranet. These can best be described as Facebook or Yammer groups or knowledge repositories. The rooms were viewed as important online spaces for cooperation and interaction. Rooms could have members and be grouped according to department and across departmental borders. Users could download and upload documents, follow them and comment, in addition to receiving messages on recent room activities. The rooms were to be administrated by appointed super-users.

During the spring of 2011, the public procurement was announced and a contract with a supplier was later signed. The implementation had a beta phase, where particular employees were invited as test subjects to have their say on the social intranet and its new embedded features. This phase was used to harvest user experiences and to correct for unforeseen technical flaws, which had to be reported back to the contractor. The task force organized training sessions. A name contest was organized and the new social intranet was named *Jubel*.

7.3 Part III: The user experiences of the social intranet

The next sections apply the concept of technological frames and emphasize what role negotiation of boundaries plays, when users play out their role performance in their use of the social intranet. To show different sides of that argument, I analyze three perspectives on how eight employees interpret sharing and relate that to their use of the new social intranet, *Jubel*. This is illustrated through what I call personal user stories, which are different individual perspectives on the implementation process. Based on them, each one has been given a theme, communicating how each user interprets sharing and *Jubel*, but also how each theme relates to

a larger domain that characterizes the informants' interpretations.²⁰ The first perspective accounts for a top-management experience. This is represented by Informant 1, who holds the position of Executive Director. Informant 1 is the initiator and manager of the internal process leading to the realization of *Jubel*. Her role has been classified as “the holistic viewer” and the domain is called “strategic motivator and facilitator”. The second perspective accounts for the practical implementer experience. This is portrayed through Informant 2, an Advisor working in the ICT Department. Informant 2 has been the chief person responsible for implementing *Jubel* and has been the project leader and headed the internal task force. His role has been classified as “between intents and practice” and the domain is called “practical technology project”. The third perspective centers on what I call “end-user stories”, which pinpoints how six employees have used *Jubel* since its implementation. These are represented by Informants 3 to 8. None of the informants work in the same department and they hold positions as a middle manager, a consultant, and three advisors. Their ages range from 30 to 60. I have classified these informants according to the themes of their role performances as: “the multiple sharer”, “the contesteer”, “the content bounded sharer”, “the user interface challenger”, “the manual user”, and “the listener”. Together, these themes belong to the domain “information repository”. The informants' backgrounds and role performance are presented in Table 7.1.

Table 7.1 Users, gender, role, position, departments, user theme, and ICTs used.

INTERNO.	GENDER	POSITION	DEPARTMENT	ROLE	USER THEME	DOMAIN	ICTs
1.	F	Ex. Director	Exe. Dir.	Initiator	The holistic viewer	Strategic motivator and facilitator	Email, Social Intranet, Phone, Facebook, Twitter, Email, Phone, Social Intranet, Facebook, Yammer, LinkedIn, Google Docs
2.	M	Advisor	ICT	Implementer	Between intents and practice	Practical technology project	Email, Phone, Social Intranet, Facebook, LinkedIn, Office Suite, QuestBack
3.	F	Advisor	HR	End-user 1	The multiple sharer		Email, Phone, Social Intranet, Facebook, LinkedIn, Office Suite, QuestBack
4.	F	Middle Manager	Secretary board	End-user 2	The contesteer		Email, Phone, Social Intranet, Facebook, Twitter, Instagram, LovData, Lync
5.	F	Advisor	Sec. train	End-user 3	The content bounded sharer	Information repository	Email, Phone, Lync Social Intranet, Facebook
6.	M	Advisor	Econ	End-user 4	The user interface challenger		Email, Phone, Social Intranet, Facebook, Corporater, Lync
7.	F	Consultant	Account	End-user 5	The manual user		Email, Phone, Social Intranet, Lync
8.	M	Advisor	Law	End-user 6	The listener		Email, Phone, Social Intranet, Facebook, Twitter, Google Docs

The initiator and top-management story – the holistic viewer

The initiator or top-management story shows a personal user experience interpreting the implementation of the social intranet from a top-down approach. The Executive Director is a “holistic viewer”, implying a user making evaluations and decisions in the context of having an “a bird’s-eye view” on the CA as a whole. This is conceptualized through projecting a view that the CA lacked strong organizational unity to perform its obligations, due to a variety of internal cultural, administrative, and technical barriers and social boundaries. These must be overcome by concrete top-management interventions.

The Executive Director’s user story seems formed by her previous top-management positions from another organization. Before joining the CA, the Executive Director worked in an organization, which received public attention. This organization was seen as being dependent

²⁰ The strategies I have used to code are outlined in sub-section 2.4 in Chapter 2.

on having good exchange of information flow in its internal communication channels. The Executive Director found the opposite when she joined the CA, which enabled her to make comparisons and a tentative analysis of the reasons for the difference. She made several observations. The CA was interpreted as being made up by various groups that did not adequately communicate and bond across departmental boundaries. Her colleagues communicated in private channels across overlapping ICT systems. Coworkers appeared not to be communicating either “horizontally” or “vertically”. She experienced that it was challenging to find information related to her role and responsibilities; she had little overview on what her colleagues worked with and their competences. Moreover, they used ICT software with poor user interface, which was technically challenging to operate:

- I-1: It was a multifaceted need to address and create an intranet that took into account the fact that we worked with various work surfaces. It was difficult. You had to open each system one at a time at a time, just to approve an invoice. It was completely separate things.

Another challenge was overcoming a conundrum that many communicating organizations struggle with today:

- I-1: Our challenge was also to escape the “hell of e-mail”, which influences so many organizations. We were not good enough at handling all the demands put on us to process all the documentation that goes through us.

These experiences needed to be addressed formally. This meant to start working on conceptualizing how to create a simpler work surface and work process for all employees, so that the CA as a whole could become more connected. This work had to be linked to her formal roles and areas of responsibilities. When the Executive Director took on her position, her work consisted of overseeing the current use and status of the CA’s ICT software, internal communication, and archival systems. Such matters are continuously addressed by top managers in public organizations and represent part of larger top-management issues on organizational change and development. The CA is legally obligated to ensure and adopt changes in legal framework issued by government agencies and embed that into its ICT infrastructure, as it has distinct rights and obligations towards the citizens it serves. The CA needs to manage its internal and external organizations too. Employees must have access to proper ICT software to perform their work. When new software is issued and updated, the CA is compelled to adjust to it.

Therefore, the top management initiated an internal strategic process. This was linked to the CA’s strategic ICT plan from 2010, which later formed the basis for the public procurement. The top management created a task force and a steering committee. The task force was organized as an internal project group headed by a project manager, while the steering committee consisting of top and middle managers. This was legitimized in the CA’s the management structure. They could now address important organizational matters. The Executive Director headed this process and they met regularly:

- I-1: We established a task force, with representatives from both the high schools and from the administration. We needed to have broad support in that work and have it established. The point is that we had the Secretary Board, which is the last chain that works with policy-making processes. We had a couple of Deputy Head Masters from the high schools, not the Head Masters themselves, but IT managers, possibly Assistant Directors. We had people from the administration,

the Unit for Secondary Training. I was in charge of that work and managed the project team. And when we did that work, we were concerned about legitimizing it in the management structure. This is a challenge. This is not just about digitalizing something. It's about the processes behind it, the culture too.

The top management concluded they wanted a single work surface and work process, which could be technically integrated and organized around the various ICT tools and computer systems their employees used every day. The social intranet would have a significant role in that part. It could be seen as the "highway", which interconnected the other computer systems and the employee to ensure an agile workday.

But another reality soon emerged. The use of the social intranet was not at the expected level. Employees appeared unwilling to engage and participate online, despite internal training sessions. The employees did not share at the expected level and made various counter-arguments:

I-1: The tools. What I experienced when I came here, was that there was complaining and grumbling on the tools we used. And now we have done something with that. We are not good enough. We have removed the counter-arguments. Now it is not the tools which is the challenge, now it's about each and every one of us, how we choose to interpret and deal with sharing our work.

These experiences appeared to trigger the need to craft a clearer management discourse, which stressed that sharing of work and having a good sharing culture is a collective organizational responsibility all employees should adapt to. This aspect seems to have shaped the Executive Director's role performance too, as she repeatedly emphasized the importance of legitimizing the need for a sharing culture in the management structure. This meant to socially institute an understanding and organizational standard into the CA, moreover, that it is part of an organizational culture. She encouraged her managers to lead by example as good practitioners, as "sharers", and to motivate their staff to do the same. The Executive Director argues that *Jubel* has been main subject in many meetings since the onset:

I-1: My responsibility has been to legitimize sharing in the management structure. My responsibility in the implementation process has been to follow and push it in the management structure. I address it with all my managers. To that extent, we have seminars, I address *Jubel* as a tool so that everybody hears it. Basically, it's just that, the legitimizing point with management, to understand it. They must address it with their employees. The management must go in front and share, start posting, there is certainly room for significant improvement, to set some standards.

There can be good reasons for "pushing *Jubel* down in the management structure". This is a relevant aspect, for example, when the CA interacts with actors and institutions outside its own turf where it is required to meet roles, expectations, and obligations. This reflects how the Executive Director relates sharing and sharing culture to a larger perspective:

I-1: How do you put the CA on the agenda, in relation to its surroundings? We have to defend what we do. Where is the CA in all this? If you don't have a relationship with the municipalities that gives you legitimacy, you can feel free to do something with internal actors here. We are located in a county with a good municipality, they're strong. How should the CA show their task portfolio, in terms of good communication? To do so, requires a common understanding of our organization.

External conditions can challenge the need for possessing well-functioning internal communication channels characterized by flows and interactivity. But the Executive Director's technological framing appears not to have been motivated by interpreting the social intranet and sharing culture as a technology project *per se*, which could be used "effectively" and "rationally" to reduce internal barriers. There is another element at hand – the need to work with organizational culture across many levels:

- I-1: It was acknowledged that we needed something that could better enable us to work with the culture across, knowledge of each other's work. Knowledge of what most of us do. That kind of thing is a learning process, in relation to the organization and people's attitudes. Sharing culture is basically about your attitudes to show your cards to others, posting, and maybe say that it has an impact on someone else, and perhaps you can get something in return. You have to give something, in order to get something in return.

The Executive Director's point is that the embedded norms and values in technologies need to be similarly approached and instituted in social interaction embedded in situations. To a certain extent, while many online ties can enable large quantities of social capital, which can be used to bond and bridge between people to facilitate cooperation, the same has to be done in every organizational context. Online conditions need to be equal in the offline world, but they are unbalanced. This means that one has to "produce" social capital, which can be used to bring down internal barriers. In the Executive Director's case, this is about communicating that a good sharing culture is part of a larger *organizational identity project*, where employees feel belonging and connected to the CA as an organization, not primarily the department where they work:

- I-1: For me, it is about identity. What is the CA? Organizationally speaking, it was, "we are regional development", "we are the unit for secondary training". The construction of strong "we" recognition – it is not easily done.

This accentuates that top-down technology initiatives often have a *social* side, in addition to the technical. This has to be given weight, if the implementation of a technology is to become a success. Top managers are required to promote norms and values and embed them into larger contexts and objectives:

- I-1: In parallel to that, we made several attempts to raise the discussion about organizational culture and work processes internally, because they are closely related to each other. Should we establish a greater sharing culture, in the sense that people, can easily participate and reinforce each other's work, or take part in reports, or take part in other kinds of things, take part in the knowledge we have. It requires a culture where [people] actively share and participate. Still, there is a long way to go. We've probably not reached our goals, but we are on our way. It is easy to publish reports, post minutes, in the different rooms. But it is also an ambition. Technology often goes hand in hand with the culture and some processes behind it all.

But the Executive Director is contradicted by her user habits. She follows about 10 rooms on *Jubel*. She is passive in some of these rooms, active in two to four. She publishes reports and minutes and admits that her own sharing practices could improve. Sharing appears to be an extra task she has to do at the end of her workday, a type of "must-do" obligation:

- R: How often do you share?
- I-1: Too seldom. It's because I hardly sit at an office desk at all. One must remember to do it in the afternoon.
- R: Is this a "duty task" that you put on yourself at the end of the day?
- I-1: If I'm back at the main office, sometimes. If I have a report that there is a point to do something with, then I do it. If you're out travelling, there is no time. I'm working more and more on the Ipad when I'm out, not from my PC. It has limits and is difficult. You can't access *Jubel* from the Ipad. It's a limitation.

The implementer story – between intentions and practices

The implementer story revolves around the personalized user experience of a male Advisor working in the ICT Department. He is the internal Project Manager (PM) and chief overseer for the implementation of *Jubel*, a project he started in 2010. He headed the task force, a project team consisting of four coworkers, split between two departments, the ICT and Communication Departments. He has supervised several aspects of the implementation process, allowing him to see nuances and evaluate the organizational realities between *intent* and *practice*. He is locked cases "between and betwixt" top management intentions and the practical realities that employees face in their day-to-day activities. This has permitted him to observe and learn from the challenges in adopting the social intranet, how one promotes the meaning of a sharing culture, how to distinguish organizational boundaries, and track what it takes to produce the conditions for online interaction and collaboration across internal boundaries. This has granted him the possibility to grasp the "real" conundrums in dealing with matters connected to organizational change and development, which he sees from a first-hand position. His role performance is shaped and augmented by these conditions.

The PM brings a substantial nuance to how the implementation process unfolded. This can be divided into the periods *before* and *after* the organizing of the public procurement of the social intranet. At the beginning, we learn that the PM viewed the implementation process as consisting of an extended project planning phase. This period comprised several overlapping and ongoing ICT initiatives, aimed at improving organizational structures and priorities related to organizational change and development. These appear clustered under a larger "ICT umbrella". They were organized by managing several ongoing and overlapping ICT projects, which had their own steering committees and were headed by several internal Project Managers. As part of that, we learn that the top management wished to integrate all the CA's ICT systems into a single user-friendly work surface. Other goals included implementing a new archival and administration system and a quality system, and embedding the Lync instant messaging system. This work also needed to conform to the CA's organizational values. But in order to meet the complexities of these combined needs, it was linked to understandable concepts, which could help in pointing the direction all of this led to. The main theme emerging from these goals appears to have been to build a better *organization culture* and *to change work processes*, which was intended to be realized by digital interaction and collaboration.

Due to reorganizing project staff on parallel ongoing ICT projects, however, the emphasis on changing organizational culture and work processes appeared to diminish in the early stages of the planning phase. Consequently, the work with upgrading the intranet came to the forefront. Project work entered a design and technical stage. The members of the task force addressed how to visualize the new intranet as a site for digital interaction. The task force worked with user interface design questions and outlined the requirements that the future supplier of the new intranet had to meet. These were accounted for in the public tender documents, which formed

the foundation for the public procurement. After completing that and selecting the supplier, the focus changed, as it had a strong technology framing:

- I-2: *Jubel* became a bit technical, after we had selected the supplier. In the pre-project from 2010, we wrote the public tender document. The call from the other ICT projects, the call from the top management, was to get a platform for sharing. This was reflected in the requirement specification we wrote. But eventually, it became a very technical SharePoint project instead.

The PM's user experience is formed by working with *Jubel* on a daily base over an extensive period. This is defined by his position, work, assignments, role, responsibilities, etc., as being a member of the task force and by interpreting an overall project plan, where the latter is referred to as the "mandate". This means that the implementation has been organized by use of project management methodologies. The mandate has played a significant part in that regard, foremost as the leading steering document legitimizing and giving direction to the task force's role in the implementation process. The mandate is distinguished as a top-management "purchase", which the task force is expected to return with a deliverable, the realization of a work process leading to the fulfillment of a functional and living social intranet. The mandate defined different legs and fulfillment of goals and milestones, but has also been subject to interpretation to gain clarification on how to organize work. The mandate described different roles between the task force's members too. Two members supervised the organizational culture aspects, while the remaining two worked with technicalities. The task force first had ongoing and regular meetings with the steering committee, where user design questions were continuously up for review. The first part of the project planning phase centered on locating the assumed needs in the CA. They attempted to find out what certain professions needed, like teachers, and adjust the user design according to that, to uncover ways that employees would be motivated to use the social intranet:

- I-2: There were many design issues. It was not so much the overall organizational issues that dominated. The steering committee was more like, "How to design and construct the intranet?", "What is important for the teacher?", "What are they going to use it for?", "What is important to people?" We made user profiles and asked, "What are your needs when you are a teacher?", "What are the needs of an Executive Officer?", "What do you need if you work in accounting?" We tried to bring up the needs of the user. This was discussed in the meeting with the steering committee. Our focus was on what is important, what should be on the cover, how the intranet should be developed. We in the project group were making suggestions with the supplier and it was important for us to get it certified and discussed in the steering committee.

Later, the project work entered a test and training phase, where the task force had to overcome unforeseen and defined challenges. The choice of SharePoint set them in a contradictory position. The social intranet is a "self-help solution", meaning that the CA had to assume control over all operating responsibilities by itself. There was no support helpdesk staff could call to solve technical difficulties after a test period was over. Employees in the IT department had to acquire technical skills to operate the social intranet on their own. This was part of the contract they signed with the supplier, meaning that it was important to test out SharePoint in a controlled environment to find "bugs" and correct them. They had to learn and know SharePoint. This work took a refined shape as the task force recruited a group of coworkers as "super-users". They were part of a beta testing phase, which involved problem solving of different assignments. The intention was to ascertain to what extent the users mastered SharePoint and to acquire data on potential changes. The testing showed positive results. The

task group later organized internal training sessions in the fall of 2013, which aimed at educating colleagues. They created learning materials such as user manuals and videos. The target group was employees at the high schools and departments, who had ICT as part of their responsibilities, implying connecting with peers. They were ascribed the role as local “super-users”, who would be given the responsibility to be local experts and motivators, to ensure that employees adopted *Jubel* and shared. This could be seen as a means to secure sustainable online participation on *Jubel*. About 150 to 200 people completed the training courses.

The implementation period was a phase for self-study and learning. The task force looked outside their own turf to other organizations for inspiration and experiences. They were interested in learning how others had implemented social intranets, which could help them to know more about the potential challenges they faced. This was crucial, as it could teach them how others had legitimized the concept of sharing and sharing culture, in addition to understanding technicalities and challenges they had not accounted for. The task force was interested in identifying how far their peers in other organizations had come, but also knowing how they had designed their social intranets. The task force looked to large companies and public agencies, like the Norwegian Broadcasting Corporation, Telenor, the Norwegian State Railways, Lyse Energi, the Office of the Auditor General of Norway, the Norwegian Public Roads, and Norsk Hydro. The task force learned that the Norwegian Broadcasting Corporation had worked with “rooms” and found that interesting. They concluded that their peers faced the same technical difficulties as themselves. Some found that early versions of SharePoint did not match up to their standards for creating condition to share, but this later changed:

- I-2: We saw that the first version of SharePoint was pretty bad, to work as a social community. It had flaws. The examples I told you about is an illustration of that, but now our users managed to add digital items into the social stream in a much better way. That has become much more central. They have managed to achieve more sharing there. It is easy to share documents, pictures, and comments, as it is on Facebook, for example.

The PM has experienced the challenges of legitimizing a sharing culture into the CA. And often it is about getting access. The PM has given many presentations and has often found his work to be in “competition” with other ongoing management priorities, implying that it can be difficult to get attention, even from top and middle managers. Others deal with relating sharing to abstract goals and concepts like “to change work processes”, “organizational culture”, and “enhancing cooperation and interaction”. This sounds novel, but when faced with practice, another reality sets in:

- R: The idea of sharing has a positive footprint, doesn’t it?
I-2: Yes. It sounds very good. It has a great positivity to it, when it’s presented, but not so great when you try it out in practice. At an early stage, there was a positive feel. You didn’t know exactly what it was. One had this belief that one should change a work culture. One thought it was much easier than it really is.
R: It’s a very demanding goal, isn’t it?
I-2: Yes, it is. I have always said that if we are going to succeed, it would require a lot from us, to get *Jubel* working. It’s a good question if we will ever arrive there. To change is something we must do it every day. It demands a lot from top, middle managers, and employees.

The PM has also reflected upon what the ideal practice of sharing could possibly constitute. This is best epitomized in that users extensively interact online by commenting, liking, sending URL links, writing status updates, forming the “social media stream” where colleagues talk to each other and bond across departmental borders. But in the organizational context, it is about making a colleague’s work accessible on an early stage, reflecting commitment to transparency and inclusion in a work process:

- R: What does it mean in practice?
I-2: This means that when working on a document, for example, a plan, a case presentation, an important note, you write it on a platform so that others can access it pretty early, so they can share.

Instead, the PM has experienced that creating a living, breathing online community where sharing happens, is reduced to basic and simple posting. Online participation on *Jubel* involves performing simple tasks and it forms an information channel. Coworkers are skillful in fulfilling certain activities that do not require much commitment, like posting a profile picture, writing status updates, tag competence and keywords, and they upload completed documents or reports, etc. But beyond that, there is not much evidence that colleagues wish to participate and engage in online activities requiring performance of reciprocal actions. Another challenge has been to work against the misconceptions that *Jubel* is a “Facebook at work”, a site where colleagues socialize and discuss leisure activities. This misconception can work against sharing. The PM has repeatedly opposed that technological framing and argued that *Jubel* is a site for collaboration, where coworkers can learn from each other:

- I-2: The message from the top management was that *Jubel* was to be a system that made each other better, better in the sense that a school, for example, could learn from another school, but it’s so watertight between them.
R: Was that something you foresaw or was it something you discovered?
I-2: This was something I predicted, but I learned that this was much more difficult in this project, than I had thought – that you have an anxiety about sharing.

The PM has experienced that sharing practices differ throughout the CA. Some departments do it willingly, while others are passive. A recurring trait, for example, is how sharing is still associated with old publishing habits. Colleagues are accustomed to the “article format”, meaning that many postings often have an “internal news story” label attached to them. There is still an internal news editor writing “news stories” and posting them on the social intranet under the assumption it is an internal web site. This practice can discourage cooperation, however, causing the social intranet to be an instrument for internal promotion or successful organizational branding. But in most cases, the PM has been met with some recurring counter-arguments, where coworkers refrain from publishing. Much of this is about their concern that publishing “unfinished work” to a large, anonymous audience bears risks and can be misinterpreted. Public feedback on their “work-in-progress” can do more harm than good. Employees know this and shield themselves behind arguments of exception, serving as a selection mechanism on what type of content can be published. Confidential and personalized information cannot be shared. Certain types of public documents contain information about individuals and is protected by other rules and regulations. Colleagues argue that there is no leverage for making exceptions, hence sharing consists of approved camera-ready documents and information or non-harmful reminders:

- I-2: The departments are focused on [the principle] that they should not post stuff like that on *Jubel*. Things like that are regulated by laws, confidential disclosures. There has never been any danger that the intention was that such stuff should come out there. We think that the problem is rather that people are reluctant to post things, which usually is the case long before you address such issue. One is afraid to share strategies. One is perhaps afraid to share a PP presentation. One might fear that others will have access to one's expertise. Competence and knowledge can be power.

But there are unexpected successes. The identity of the intranet, "*Jubel*", is commonly used and accepted among employees. During the onset, the task force had discussions on what to call the social intranet and carefully decided which names to use:

- I-2: We wouldn't call it "on the inside". We wanted a better name. We were afraid that the name could be used against us. In retrospect, it was a good name. Now people use it. "Can you post it on *Jubel*?" I don't regret the choice. We called it that, so that we shouldn't put so much meaning in to it. We did not want it to be misinterpreted. We wanted an easy name.
- R: Names have a lot to say.
- I-2: It's hard to find a good name. Just the name "the intranet" or "on the inside". The latter sounds like a prison!

Another unexpected success is that coworkers have shared information, involving accumulation of large amounts of digital content:

- I-2: Ninety percent of the info posted on *Jubel* is not something that we've published. It's made by the organization. There are a lot of documents. It has become a place where items are shared. It's divided between heavy and light documents. People share when documents are finished. You don't see many examples where people collaborate on a document, which is part of a work process. Some have acknowledged that it's better to have documents there, than in a file structure. There is more sharing like that, more documents. We haven't gone any further in changing work culture and the ways we work. That's where we struggle.

This trait has involved the need to develop specific role performance strategies. To create increased interactivity so that sharing can potentially generate a social media stream, certain coworkers have been ascribed an online community role as "sharers", which implies being a generator of publishing activities. The PM has attempted to practice this role himself, but it can prove to be challenging to maintain it:

- I-2: I try to set an example. When I create a document, I publish it right away. It says it's a document in progress, which we're working on. Otherwise, I try to post my status. If not every day, at least a couple of times each week. I tell what I'm doing. I can also see that even among those who [just] post their status, I find much useful information, which relates to me. I know where my boss is, I know the processes in the organization. In the social stream, I see a lot of potential for sharing.

Although coworkers are not online contributors on the expected level, the PM sees many potentialities in the social streams and using a SNS:

- I-2: You don't think of a SNS as part of your work. You relate to formal structures, as you are more psychologically there. We have a flat structure, but we are after all still part of our units. We have our duties, working there, and have our responsibilities. You are responsible for your stuff, but you don't see yourself as part of an interdisciplinary network. To launch a social intranet, it's not enough to say that people should start interacting on a professional SNS. People are very attached to their unit, the department, and the tasks they carry out there.

A contradictory user pattern, however, is how the PM has used social media to perform assignments as part of his work, reflecting how employees take the initiative by starting to use "unlicensed" ICT tools as part of their work practice. For example, as it is not uncommon that employees create Facebook groups and Twitter accounts to discuss and retrieve information or co-write Google Docs, an opportunity the PM has used himself:

- I-2: We're currently working on a web site that deals with drug use. There, we have internal and external partners. We are seven or eight persons. And we said, we're going to use Google Docs. And it was okay.

End-user 1 – The multiple sharer

End-user 1 is a user story about a female employee working in the HR Department. She holds the position of Advisor. Her main responsibilities are collecting and systematization of information to prevent unwanted events, actions, and practices, defined as potential risks to organizational life. Internal training is part of her work too.

The theme "the multiple sharer" indicates the role performance of a user who faithfully undertook her responsibility to be a "good sharer". This is reflected in her attempts to create online engagement and draw attention to one of the rooms she administers on *Jubel*. Formally, she is a super-user, an online community administrator with rights to publish on a site intended for online collaboration, which is similar to a Facebook group or knowledge repository. But this performance is experienced as contradictory. She often finds herself sharing information across many communication channels, foremost in the e-mail domain where most of her colleagues interact. Here, she tries to motivate coworkers to visit her rooms. She has adopted a user pattern to maintain the goal of being a good sharer, turning into an active "pusher of information" on the room's members. This results in an unintended sharing practice consisting of sending many e-mail reminders to colleagues, containing the message that she has uploaded new documents on her rooms. This is performed repeatedly. We learn that this seldom results in increased interactivity, but merely that new documents are recently published and can be accessed. Her preferred site for online interaction is on private chat channels and e-mail. She practices strict criteria on what type of content can be published on the social intranet, implying personal negotiations of social boundaries across several trajectories.

Personal boundaries are however formed based on how she has previously engaged on various social media platforms. This has taught her to set clear and rigid distinctions between what is *external* from *internal* use in the CA, from what is defined as *work* and *non-work* related uses. This is reflected in how she has engaged in two SNSs, Facebook and LinkedIn. Facebook is seen as belonging to the private sphere and is an "off-limits" site for work. She describes herself as a "light and self-controlled" user on Facebook. She has been registered on it since 2008, but restricts her engagement to positive sharing, liking and watching of pictures. She administers a couple of private Facebook groups. She has a few colleagues from the CA as Facebook friends and only adds people she knows from the off-line world. LinkedIn is seen as a suitable SNS to

fulfill the parts seen as work-related. She is member of a couple of groups, but does not publish anything there. She follows discussions related to her field. LinkedIn is used so that professional connections can contact each other. This user behavior is related to previous work assignments. For a period, she was representative in one of the CA's worker unions and interacted with similar representatives from other CAs. As part of it, they created a Facebook group, so they could stay in contact. It was used to share documents and had no online discussions:

R: Do you use social media at work?

I-3: No, I don't, but I've done it. It was part of a different role, which was part of a task I had here in the CA. I had contact with others with the same role in other CAs. We used social media to share information that was more or less of the same nature. It was a way to share knowledge.

R: What did you share?

I-3: It related to issues on health and safety at work.

This experience seems to have set a personal standard and decision for how she shares, as she now makes distinctions on *how* she shares, in what *context*, and for which *audience*:

I-3: It has been a very conscious choice, that I don't mix the two.

R: When did you make up that reflection?

I-3: I had a representative role. And then it didn't feel natural. There is something to be Facebook friends with the people you meet on the other side of table. It was more of a conscious decision I had in relation to that position, compared to the work that I do now.

She uses ICTs and communication channels to perform her work and to stay in contact with coworkers, such as e-mail, phone and Lync. Other tools are used to retrieve and share info:

I-3: I use XL, Word, and PowerPoint for presentations, YouTube too. I use a system called QuestBack, which is used for conducting surveys. In QuestBack, one asks, "What you think about that?", "What do you think about this?", but it can also be used to collect reports, as we discovered. We use the social intranet to give information. I also use internal systems, like Agresso, which is a salary and appointment system. I'm not a big consumer of it. You register your hours and enter travel expenses. If I'm travelling, I use a system to book trips.

The Advisor used the old intranet, which she saw as a bulletin board. She sometimes published on it, but it was largely used for information retrieving. It was difficult to use too. The user interface had poor quality, meaning that the publishing process itself made little sense. It had many technical limitations. For example, she experienced difficulties in locating where she actually had posted her items. This had consequences for how she interacted and what strategies she developed for searching and retrieving information. Oddly, she had to rely more on her personal *memory* to perform strategic searches:

I-3: You had to remember where you could find things and it had to be recently posted. Not everything was logically constructed. Gradually it became confusing. You make menus, then you had to add a new element and then something could be stored in one place and something elsewhere. And then, things didn't connect. And so it was a bit like "that document, I have saved under that menu and that document I had seen under that menu". And then you spend a lot of time searching your ways around to find what you've stored.

On the social intranet, she describes herself as an average user. She has attempted adopting and adjusting to the new features in *Jubel*. She is super-user and has the right to publish and upload documents on rooms she administers. Running them is challenging:

- I-3: There are some rooms, but nothing happens there. We call them rooms, but it's a web page. They have followers. If something happens, it shows up in my news feed.

The main challenge is lack of online interactivity. This has involved the development of a role performance to create conditions for better sharing practices and online dialogue in her rooms. She has pursued the role as a type of "online gardener" and attempts to encourage her coworkers to engage. Her approach to solve that has been to take on the role as a "sharer and pusher of information", which appears to consist of sending friendly e-mail reminders that she has uploaded new documents. But she finds herself caught in two separate domains of communication practices, meaning that she often shares information across multiple channels that expand beyond the room itself, creating dilemmas:

- I-3: I send an e-mail to everyone who has an interest in the room's activities, to the relevant contact persons. And then I share information with them that it's posted on *Jubel*. And then I invite them to follow the room, because there is information there that is relevant to them. And, then I say that the information will only be posted there. That I've done for about a year.
- R: You've done that for a whole year, you say?
- I-3: Yes, I've done it since they implemented the social intranet. And I think, it's about time that we need to address what we can learn from it.
- R: And what happened then? It appears that you've been very consistent on informing in the same way. Did something happen?
- I-3: I don't know. I can't see if there are many who follow them. And I've indeed called for that, that you should have the possibility to see who follows the rooms. What I plan now is to add relevant people. We can add people automatically, and they get the information the same way. Those who are not members must follow it themselves.

This constitutes a dilemma. She is uncertain about a room's potential audience, implying that she has little way of knowing how much her informing practice influences the receivers to engage. The rooms operate with two embedded features in SharePoint, *followers* and *members*. Members are visible with *names* and have to be manually included by an administrator, while the name of a follower is *not* so visible, implying that a social intranet user can follow several rooms without his or her name appearing. This means there are overlapping and invisible audiences for those who administer the rooms. Instead, sharing turns into an unconventional practice. The Advisor shares information on *Jubel* and *on e-mail* about the same matter, involving multiple ways of *communicating the same new information*. Sharing turns into a practice of double communication, which appears coordinated on a personal and habitual level. She tries to uphold the goal of being a "good sharer", but communicating many-to-many meets with little response. Multiple informing enables her messages to get through, but she is uncertain if it is the sharing on e-mail or on *Jubel* that made the difference:

- I-3: It's not easy to say, since I send out e-mail too. For example, when we have courses, all the participants receive e-mail about it. Then we will also have to do it the same way that we send out an e-mail and notify about it. And I don't know whether it was the social intranet or e-mail that did trick.

The absence of an online dialogue means that sharing turns into an informing practice, which generates *expectations* about information that is on its way. Besides that, using *Jubel* represented a learning curve. She has self-tested it and not all the SharePoint features are evident. They cause misunderstandings, even on as essential a feature as publishing items:

- I-3: I think it has flaws, if you compare with Facebook. For example, when you are to publish something, you have to click three different places for it to be published. It can quickly be that one forgets that. And if you're a bit sloppy, you have the risk that it will not be published at all. It's also difficult to type information that is supposed to go into a defined space, there is no room. I am missing an entire field. You can adapt to it, but I think it has flaws. It's supposed to suit many needs. The social intranet has a standard which can't be shaped to certain needs. One must adapt to it.

Sharing also appears to be about learning to perform a self-invented publishing strategy, to produce *pointers* to information and to redirect and get the attention of her coworkers. This has to be performed repeatedly. And there is flipside to share information across multiple communication channels. It seems to come as a routine from trying to adapt to *Jubel*, but reflects re-publishing of information that is already available elsewhere on other ICT platforms:

- I-3: I have tried to adapt to social intranet, by arranging what I have, so that it will be okay. I publish news while I add new documents, for example. This is done so that people know that the document is there. You can't publish all at one site... The stuff I have posted recently was on occupational health, for example, which should provide info on what a person should do before going to order an appointment, what one should consider when you want an ergonomic workplace, information I posted on the room on occupational health. I notify, I publish documents, and then I notify about it on the general Health and Safety site. I could also have published on CA's web page for company health.

She uses the social intranet in the same way as she used the old intranet, to search and retrieve for information. This is done every day. And if she searches for something, she finds it. She can get many hits, but has created her own filters to narrow down the information she is looking for. Often she looks for specific coworkers to find her "way through the organization". The lack of online dialogue means that she has not started to interact with new colleagues from other departments. She mainly interacts with coworkers from her own department, which is often locked to closed channels. This is where she collaborates and coordinates her work:

- I-3: It's on e-mail and Lync, and telephone. My impression is that what I've seen of dialogue going on the social intranet, it about social things and commenting. For example, someone created a ski or a cycling group, something like that. Then people will come out, then there is some dialogue. There is little that I have seen that is job related. In the other programs, you have the opportunity to have private dialogue. You don't get that on the social intranet.

The Advisor points out that sharing on *Jubel* is about off-work issues. Coworkers address their social life at work. This is ascribed a "Facebook value" in the sense that it does not belong on a professional SNS. This information sharing can discourage the intended professional interaction and collaboration.

This raises the question, however, of what type of information can be, should be, and is acceptable for her to publish. What can be shared and how willingly is she to open her work process to others in an early stage? The Advisor argues that sharing is beneficial and that she would encourage colleagues to give feedback, but her own criteria is that online items should never be “unfinished work”, but of a camera-ready quality:

I-3: You should publish things that you stand for. It should be a finished product. It’s aimed at many. It is important that it is thoroughly worked out.

There is a threshold and self-censorship. Another factor contradicting sharing, nevertheless, is the argument that potentially documents ready for publishing should be evaluated and approved by a top or middle manager affiliated to the management structure. This means that merely digital items of a neutral value or information approved by an organizational authority can be published. Besides that, the Advisor argues that she only shares information intended to improve work life conditions:

I-3: I don’t publish that many documents. They are mostly related to work life conditions. They often contain the message, “these are the things you must do and remember how to do it”.

End-user 2 – The contesteer

End-user 2 is a female employee working in County Mayor Secretary Board. She holds a middle-manager position. The Secretary Board operates between the CA’s political structure and the administrative body and serves as a practical liaison between them. The Secretary Board carries out practical arrangements and prepares and organizes the political process. Her responsibilities relate to organizing and facilitating policies being practically implemented and transferred to the correct and responsible units in the CA.

The theme “the contesteer” indicates the role performance of a user who interprets *Jubel* and sharing differently than the previous user story. Much of this deals with pinpointing challenges and contradictions with sharing, in addition to questioning the intention behind the implementation. She recognizes that it has not fulfilled its expectations and goals. This relates to her experience as a user, which illustrates how a super-user discontinues administering her rooms, as she sees that certain practical consequences outweigh the benefits of sharing. The reasons cited are that sharing can lead to information overload; that published content is not used; and the need to design new personal search strategies, causing disengagement. Instead, the Middle Manager prefers the old intranet and notes that the upgrade did not lead to changes in her own use or ways of working. She continues interacting on closed channels, preferably on e-mail and phone. She also practices strict criteria on sharing, which implies personal negotiations of social boundaries across several trajectories.

This is related to previous user experience of social media platforms. Here, we find an example of a user who adjusts her use according to three SNSs: Facebook, Instagram, and Twitter. They are used differently and ascribed various labels. Facebook and Instagram are for private and social uses. She has been a Facebook user since 2007. She is a passive user there, shares little, and only adds close ties to her online network. She does not want to be accessible and sets up boundaries to protect privacy. Twitter is used for work, but her approach to that was more random. She has a read-only approach to tweeting and describes it as a listening post, to monitor what is going on and to stay up-to-date on current events:

- I-4: I use Twitter because it gives me something related to my work and because I follow public debates. That applies to work and my private sphere. It was my work use that was the door-opener so that I started paying attention to what was going on Twitter. In our department, we follow public debates. It's fun and useful to follow them. Some of our politicians are active on Twitter. It's more a work thing, combined with general community engagement.

For several years, she has developed a critical approach to sharing. She does not tweet and has clear perceptions that any online content needs to have certain quality before it can be shared, being interesting, relevant and novel. Sharing personal status updates is omitted:

- I-4: I don't share information about what "I've eaten for dinner", what I do during my evenings. I share if it is appropriate and relevant, not just one of those private things. I can share information about kinds of things I think may be relevant to others. Sometimes I post pictures of a mountain summit. But I have pretty high threshold that the summit should be a little more interesting for others to see. I am critical about what I publish and what others share.

Her work surface paints another reality, as it consists of e-mail, phone, an administrative processing system, and *Jubel*. She spends the work day in the administrative processing system, which acts as a gateway to other Internet resources. Searching, retrieving, and ordering of information from the Internet is essential to her working day:

- I-4: The systems we use are based on the Internet. We can't enter the administrative processing system if we're not online. That's the first priority and the first thing we do in the morning. And we're there most of the day. I use it to find information. I use a system called Lovdata, the government's web pages, very much about information gathering. And that's where I am most of the day.

She explains what the administrative processing system "is" and how she uses it:

- I-4: It consists of everything that the CA receives and sends out through mail inquiries, all the cases that either will be processed administratively or politically, is in that system, everything which has an archival value, which one way or the other is in that alley. I use it to receive inquiries and identify essential information needed to find answers to calls, writing cases that are up for political review, write cases and facilitate them for political processing and make sure to provide the right processes in relation to that, to get them to the right committees, and facilitate the work for the committees. And approve political meetings, through designing meeting requests and meeting protocols, which we again send out and publish online.

The Middle Manager is a super-user and administers two rooms. Both rooms have middle managers as target group. The first is for political meetings and committees, while the second is for managers. She is most active in the latter room. Contact information, case documents, minutes, and reports, are regularly uploaded. She has invited colleagues to follow and become members, but experiences that interaction in them still remains unfulfilling:

- I-4: I note that there are not many who follow the rooms, after many invitations and reminders to others who I think might have an interest in it. And then my thoughts come. Do we spend unnecessary time on posting information that people do not read anyway?

This raises the question whether members read the published material and use the rooms as intended. For example, after uploading, coworkers have also requested if the same documents can be sent by e-mail:

- I-4: I often get the question, if I also can send them an e-mail, when there is something new, because they claim they will be updated. We have made a conscious decision on that, no, we don't send an extra e-mail. We put it out there and then people must seek it out themselves. I feel that people don't pay attention to all that is posted there. They would have paid attention, if we sent it in an e-mail. But we have made a conscious choice on that. I think that people read it if they get an e-mail, because it's a direct message aimed at them, rather than that they must search the information themselves.

The Middle Manager worked in the CA when the old intranet was up and running, meaning that she has experienced the implementation from two sides. And *Jubel* appears not to have made a difference or lived up to her expectations:

- I-4: We use it the same way. And that applies for myself, although I share the same ideas and the intention behind *Jubel*, in relation to sharing and to doing information searches about each other's work areas. It's still an intention that employees are to publish information on core competencies. I'm uncertain on how they are carried out, how many people who do it. I note that I don't use it. I don't use the information that others publish on themselves, as much as I thought I was going to do. I realize that I'm not any good at complying with that intention, although I think that I and my department are active users, compared to other parts of the organization. I miss the structure of the old intranet. And that was a conscious decision, that we're to abandon the old structure and to be based on searches in the structure we have now. But I miss the old structure. I find it harder to find what I'm looking for on the new social intranet.

The Middle Manager's experience shows a gradual disengagement from sharing, as it vanishes and is overtaken by completing other assignments seen as more important. At the onset, she and her coworkers supported the use and intention behind *Jubel*, but sustaining an established sharing practice over time diminishes:

- I-4: We have two rooms. And I post a lot of information there. I try to ensure that new information is posted too. I think, I need to fulfill that. But I do not use the opportunity to follow other rooms, for example, as I had hoped that I thought I would. It disappears into my daily work life. When I need information, I don't find it, with the search mechanisms that we have today as we had with the old intranet, although there is more information out there now. I believe that it does, although that I haven't done any research on it, but overall, I believe it is. But now I think it is harder to find information.

Long-term sharing has produced an unforeseen *information overload* issue. Sharing leads to a complex work surface containing a large amount of information distributed across new areas on the social intranet. Her coworkers' sharing practices have led to replacing of information. While there has been a practice that information is regulated and stored locally on a hardware or local folder or server by providing access by user rights, for example, implying that users are accustomed to knowing where the information is stored, this is now turned upside down. Making information available to create transparency leads to other implications:

- I-4: The intention with the social intranet was that we should move away from local storage of information on our own local folder structures. Everything was to be stored on the social intranet. I'm skeptical of that, because it is such a vast amount of information that it makes it difficult to identify what is relevant. We end up with huge hits when we search and we spend a lot of time on finding out what is relevant. And when we do not have the rigid old structure, which we had under the old intranet, we spend time looking among all the hits we get. I think we could have wanted it to be a little stricter on what should be stored. Things should be deleted, if it is considered [ir]relevant. I'm also skeptical that we use this as a primary storage source for everything. I'm also concerned, because we could forget the formal filing and procedural rules that we would have to deal with. When we publish on *Jubel*, we think we preserve it forever. And that's not right. There are some formal things that make me skeptical. The most concerning thing, however, is that it has become such a huge volume of documentation. And when it comes to relevant and non-relevant information on individual characteristics, I am a bit skeptical of that Facebook style of writing status updates. I think it's nice to have colleagues, but it's more interesting knowing how we are professionally connected. We are a large organization. If all of us post information that we were sick, and that they are looking forward to the weekend, there is a limit to how much of that information I want to see. I think it takes another turn and we're moving towards that side. That part of *Jubel* I'm not thrilled over. I'm one of those who think that when I'm at work, I'm at work. People can tell me interesting things that are useful or fun for me to learn at work. I don't want a lot of private information, which I'm not related to.

The Middle Manager's theory on *Jubel's* status relates to the fact that users who follow the intended use experience vast quantities of information which makes it difficult for them to perform crucial tasks. Colleagues spend much of their working day searching for information. Being additionally bombarded with information on top of that, makes it even more difficult to perform strategic searches. This creates confusion on where to start their searches:

- I-4: That's what I feel that we don't have in the current social intranet. When I used the old version to find information about any person or anything, I knew where I could start. And I could start searching downwards. I would find an answer. Now, when I enter the title or name of a document, I get 150 hits. I start looking. And then I find documents that expired three years ago. Or there may be irrelevant information, which is really about other things, but has it as topic or keyword. So I'm getting so large hits that I think, no, this I do not bother to look through. I'll call and ask instead.

This experience involves questioning the point behind sharing, as it can grow beyond the limits of how much one person can manage. Sharing grows to become too complex. Her suggestion to solve that is to develop more refined and effective search strategies and for sharing to be benchmarked with formal guidelines:

- I-4: I think we must have a system that tells us quite clearly what we will share. I'm skeptical that we should just push out information. I believe that many do not choose to do a review, but just shove on. The intention is only to push out everything. I think that we end up with a large amount of information, and we are not sharing, because many will just resign. We just give up and this works against the intention behind *Jubel*.

The Middle Manager stresses that she is not against *Jubel*, but merely pinpoints an organizational compliance issue, the reality between the intention behind the implementation and the experience of sharing in practice. These need to be amalgamated, so that sharing does not result in pushing out information for the sake of fulfilling a goal, causing information overload on coworkers. An effect in that regard is that the potential positive value of a social stream can be evaluated as irrelevant. Coworkers can feel that and choose to disengage. This implies that one can find that colleagues will deem it more efficient to remain in private and closed communication channels and interact and collaborate there. The Middle Manager appears not to be an exception in that case and seldom sees any online dialogue:

- I-4: Definitely not on the social Intranet. Sometimes I see that people have posted a question or commented on stuff, with an expectation of feedback. Neither I nor others respond to it. Some of my dialogue goes on e-mail. It's often things that are not suitable to post on *Jubel*, because it concerns a minority. I have quite long email threads that go back and forth. It's often things that can't be shared with others, perhaps necessary to keep within a group, because it's on a clarification phase and it's inappropriate things that shouldn't be published.

The Middle Manager explains that sharing on *Jubel* has not led to her connecting to new people. She still communicates with close professional ties and those she sees as being part of her field. Expanding beyond her departmental borders occurs rarely. This means that we learn that sharing takes place, but that she has clear perception on what can be shared. There is a high degree of threshold, forming normative views. Sharing for the sake of sharing is seldom acceptable. Published work should have some sense of quality to it, meaning the exercising of quality editorial control:

- I-4: One thing is that some of us find it a bit uncomfortable to share things that are not finished, because then we get criticized. It becomes uncomfortable when it's not completed. We are a big organization. If things are just published and not finished, it can cause more harm, because it creates sanctions on something that it was not intended to be. We have specific discussion within our work areas, documents concerning management side and on the political aspects, which we publish. It is that when things are at a certain stage, a working document, it is not intended that everybody should see it. If there are many who use it, they can abuse it in a number of contexts. We are an organization with many employees and we don't know much about each other's work. I'm a bit critical [of the principle] that we should share everything, which is not finished, but some things that are not completely finished can be shared.

End-user 3 – The content bounded sharer

This end-user story is about a female employee holding the position of Advisor. End-user 3 works in the Unit for Secondary Training. This carries out educational policies and serves the CA's 22 high schools. She works with planning and organizing needs for students requiring special assistance on issues like admission and apprenticeship training. She works especially with students who have ascribed legal rights on special training. This means that she deals with and communicates much confidential information, which is directly connected to students' rights and the CA's responsibilities towards them. Her position requires daily and extensive contact with peers working in the high schools, which often involves facilitating how such students are to be integrated in their future education.

The theme "the content bounded sharer" shows a role performance of a user who disengaged from the social intranet, meaning that we see the same pattern as in the previous user story. She was at first an enthusiastic sharer, but stopped performing that role. This change is not because she is reluctant to share, but because she realized that it could not be done, as it was not compatible with the realities of her responsibilities and daily interactions. Some information cannot be shared and is bounded by its nature and confidentiality. And when that is a truth, this has involved returning to communicate on e-mail, phone and on chat channels. This trait also reflects negotiations of social boundaries across several trajectories.

Addressing the boundaries more accurately, these relate to previous user experience of social media. End-user 3 uses only Facebook, but opened a Twitter account, which she has never used. Facebook is used in two ways, in private and at work. In the private sphere, she regularly shares and interacts with close ties. But her position has also involved the creation and administration of an official CA Facebook page as part of the responsibilities she carries out in her department. In 2011, her unit was contacted by the Communication Department, which asked if they wanted to be part of a pilot project. This aimed at using Facebook as an information and interaction site, which future students could use when they apply for admission to the high schools. The project was not part of a top-management initiative, but came from "within the organization". She and her coworkers were positive about it. They created the Facebook page on the assumption that students would contact them there. And as students are in the social media landscape, they concluded that they also needed to be present there in a similar way. But before opening the Facebook page, they designed principles and strategies for how to manage it. This included defining their use, roles and responsibilities. They wrote official guidelines, illustrating that the official Facebook page was appropriated with their own organizational logics and under some degree of editorial control:

- I-5: There were two of us from our department, who work with admission to high schools. We had a long process with two coworkers from the Communication Department. We worked on getting the technical and visual aspect right. And we worked on how to communicate on a Facebook page. And we wrote guidelines.

Today, she and two colleagues manage it. After two years of use, it has roughly 300 "likers", but their expectations have not turned into a reality. They do not get many requests from students. It has turned into more of a public bulletin board where they post information:

- I-5: It runs every day. We don't get many requests. We publish when we have specific information. We were unsure whether it would be an active user channel. I think it's going to become that in the long-run. We intend to continue to use it and improve its uses. And even get more users. We still believe that it has a potential, which we haven't not realized yet.

Her work surface consists of a variety of communication channels, like e-mail, phone, Lync, a case management system, and an administrative processing system. The Advisor used the old intranet, but framed it from a "read-only" approach. She was more a "reader" of news stories and published information on activities related to her department. This means that she mainly saw it as a bulletin board and used it for information retrieving. The old intranet was not seen as a platform designed to be suitable for sharing. The implementation could change that to a collaborative interaction, something that allowed her to experience two sides. During the onset, the Advisor was enthusiastic. There were many possibilities. She took on the role as super-user at her department. She administered rooms and followed others. She added coworkers and uploaded documents to the rooms like creating a user profile that showed her personal competence. She tagged her user profile with keywords and made herself known to the rest of the staff. She attended the training courses. In that way, she carried out and fulfilled the goals set by the top management. Over time, her user pattern painted another reality:

- I-5: In the start, when it was brand new, I made an attempt to make use of any opportunity, which was not in the old intranet. We have the possibilities to create rooms. I did that and invited people. I joined other rooms. But afterwards, I failed to follow up all that. In neither the rooms I administer did I manage to develop anything. I'm rarely there and check the rooms that I am a member of. I thought I was going to do that. When it comes to searching for information, people have been good at posting what they work with. It has instead become a tool for searching for information. You can easily search names and themes and get results. So it has become easy to find the things I'm looking for.

The Advisor saw the rooms as an opportunity to create better conditions for interaction with the high schools. Much of her daily contact with the high schools consists of sending general information. Instead of sending all of that on e-mail, this could be transferred to the rooms, a rearrangement that could save a lot of work:

- I-5: A lot of our communication is on e-mail. We hoped that the rooms could improve our communication with the high schools. I created and filled out the information on my profile. I posted many keywords on what topics I work with, so I can be easily searchable. I did that early on. I created a room, which could be used to have dialogues with the schools, both with the Educational Psychological Service and the staff at the high schools who work with that type of students I work with. I saw that it was a lot of general information on procedures, forms, and maybe some subjects that are on some general themes.

In reality, the things which are published there are just general guidelines with forms and some procedures. But, then it has only been left there, dead. She commented and wrote updates in the beginning. She has shared mostly approved and finished documents, which she assumed had value for the people she worked with. But afterwards she stopped doing that. She had personal plans to learn and develop *Jubel's* features, especially those embedded in the rooms. This could improve her ability to interact and collaborate. But her disengagement has been attributed to

various reasons: lack of time and that other responsibilities needed prioritizing. This had an effect on her performing the role of super-user and administering her rooms:

- I-5: I haven't had time to prioritize them. It comes far down on my priority list. My workday is so packed with "to-do tasks". To sit down to try to develop or utilize the possibilities and communicate in the rooms, for example, has instead led to that I don't do that.

This has been replaced by going back to using her former work surface:

- I-5: We have to go through *Jubel* when we log on. Now, I don't bother checking notifications from the rooms I administer or follow or what my colleagues have written in their status updates. I skip that very fast and I go directly to check my e-mails.

This change from an enthusiastic end-user to a disengaged one seemed to happen early on. When *Jubel* came, it was a "vibe", described as a positive energy running through the Lima Organization. But she realized that sharing became challenging as it contradicted the realities of her responsibilities. She works with sensitive data, which connects to specific individuals. This information requires strong confidentiality management and cannot be shared on an open platform:

- I-5: We can't publish information related to individuals on *Jubel*. I can't escape that part of my job. The challenge is to find out what is general information, which can be published, information that can't be linked to named individuals.

This means that the Advisor continued using e-mail and interacts in private communication channels with her colleagues at the high schools:

- I-5: It's hard to escape e-mail. There's a lot of communication on the life situation on individuals. We can't take that on *Jubel*. I will never escape that one-to-one communication. I had hoped that I could use *Jubel* for more general communication. I've posted a lot of key words. If people are looking for those things, they will get a hit on me. But I think I've never received a single call from anyone in the CA, who said that they contacted me because they found a hit on *Jubel* linked to my background and what I do. Those who know that, they contact me on the premise of that.

These experiences involve a clearer focus on what can be shared and indicate some contradictions. She notes that her organization tends to have several ICT systems containing an abundance of general information that "circles around", but is stored in various places, like on local field structures. There is room to economize in that aspect. One can reduce its volume, so that the same information is not republished every day and cause information overload:

- I-5: We use multiple channels to publish the same information, the Internet, the social intranet, this ESQ system. We send things on e-mail as attachments. I don't think we have come to terms with or are aware of what can be posted on the social intranet, or what we fill up our inbox with.

The Advisor believes the flipside to sharing and a sharing culture is a sensitive matter that has caused colleagues to be more aware on what they publish:

- I-5: We have collective file structures where we stored things, like minutes, different information. Everything. The most extreme ones wanted to just shut [them] down and delete the content on these collective file structures and post everything on *Jubel*, just to close that opportunity to use them at all. The aim has been to clear them out and make us publish only on *Jubel*. Then the discussion gets going, should everything be opened out to everyone, like making all the meetings available? Do we want that the minutes from a group meeting could be read by everyone in the CA? That runs deep, I think. The idea of transparency is good, but we must have a discussion on that one. Not everybody feels comfortable with posting material ready to be read by everyone.

The Advisor has beliefs on what content that can be published. Although she draws a distinction between *individual* and *general information*, which requires exemptions, she can publish content that is not “finished”, in order to get feedback:

- I-5: I don't have any problem with posting something that is not one hundred percent complete. I would have made it very clear that this is “work-in-progress”, which I want feedback on. Is this a completed document or it is in a process? I would have been very clear on that. I would not have had any problems with posting something that is unfinished and is part of a process.

End-user 4 – The user interface challenger

This end-user story is about a male employee holding the position of Advisor. End-user 4 works in the Financial Department. His responsibilities consist of reporting, analyzing, and providing indicators on how well the CA is fulfilling its organizational goals within distinct areas it administers. His workday consists of receiving and retrieving information on the performance of the departments belonging to the CA's administrative body. He makes that available and understandable in internal reports and strategy documents. These are read by politicians, middle managers and directors, and are used as foundation to determine future directions in policy-making processes.

The user story “the user interface challenger” displays a theme about the role performance of another disengaged user. We learn about a user who sets strict criteria for sharing. Information should not only be “finished”, but also be approved by a higher organizational authority in the CA's management structure, before it is published. In theory, this means that information should first be reviewed by managers and use the CA's internal quality safety systems as a safeguard to avoid risks and misunderstandings. The Advisor questions the social intranet's user interface, where the latter is challenged for its non-user friendly design. It is considered demanding to use and not always conceivable. This means that the Advisor negotiates and draws up personal social boundaries across several trajectories.

These are traceable in how he uses various social media platforms. The advisor makes a clear distinction between private and work related uses. He has tried two SNSs, Facebook and Twitter, and concluded that both belong to the private sphere and are off-limits at work. He started using Facebook rather late and checks his profile occasionally. He has adopted a self-censoring approach and rarely shares:

- I-6: I got Facebook on my phone and check it during lunch breaks. I arrived late on the Facebook hype and have never been a good user.
R: Are you skeptical to Facebook?

- I-6: In the beginning, yes, but I realized that I felt “outside” if I didn’t have a profile, which was updated with something once in a while, with an entry. I’m never super private. I never post images of children. You could say that I’m a “lurker”. I’m on Facebook to read what others are doing.

He briefly tested Snapchat, but concluded that he is too old and does not see himself to be part of the photo messaging application’s user group. He tried Twitter and determined that it was not the right thing for him either:

- I-6: Twitter, I’m sure it’s great for those who have much to tell, but for the average Norwegian or citizen of the world, I don’t think it’s interesting to read messages. Besides, Twitter has evolved to become a medium where one only sends URL-links to news stories or maybe its commenting areas. And you often end up where you started.
- R: So you’ve been on Twitter and looked at it?
- I-6: Yes, I’ve been there and peaked. When you read news stories and get to the bottom of the page, there is often a commenting field. There, people link to Twitter, as I later realized. And I just discovered that you very often get URL links to the same news story you’ve just read.
- R: Did you register yourself on Twitter?
- I-6: Yes, I think I did that once, but I can’t remember my password or username.
- R: So, you have a reserved relationship to social media?
- I-6: Yes, it’s necessary. You encounter things in your everyday life. Social media is certainly nice to have, but I’m not a compulsive user of it.

This user experience reflects a view that sharing and being a contributor to creating news feeds are not evaluated as meaningful practices. Instead, commenting and sending URL links are perceived with skepticism and is extra work, leading to be exposed to unnecessary information. This has to be filtered, especially when one is exposed to intimate details about a person’s life in a public domain. Too much social grooming also leads to classifying the information sharing as “uninteresting”. This has led to this informant having a strict relationship on how to engage on social media:

- I-6: When you’re on Facebook or an equivalent to that, or I can’t use Facebook as an option here, there are those who write a lot of strange things. And that shows. You’ve got over 100 Facebook friends, but they have to be called acquaintances. You press “yes” to many friend requests to people that you in reality can’t call “friends”. But you’re curious. There are some people who write things that shouldn’t be shouted out loud. One gets the impression that, “I’m sad today”, “I’ve just had dinner”. It’s a form of uninteresting communication.
- R: Should it be of quality?
- I-6: It doesn’t have to be that, but doesn’t need to be a public appeal either.
- R: What do you mean?
- I-6: If anyone has had a nice trip, which is worth writing about, then you can do it, by all means. It’s easy to explain it, but when you see it, it gets difficult to say it with words. There are some things that are just a bit “intimate”. It’s too personal, one might say. Very personal stuff. It doesn’t belong on social media, because it doesn’t concern everybody. Are there things there, I would have said to a random person I passed on the street? Yes, no?

He has never used any social media software as part of his work. This has never been deemed as relevant. He explains that many of his colleagues are not used to or do not see the value of social media. With many of his colleagues not online, this influences him and he adjusts to that. They are more loyal to the e-mail communication practice “copy to all” than engaging in a social media stream. His work surface consists of using several ICTs, like *Jubel*, Corporater, Agresso, external web sites, and e-mail. He uses Lync, which he sees as a new version of the old “MSN Messenger”. He prefers communicating by e-mail, as it gives order and allows that all his interaction and communication is stored in one place. Regarding his use of the social intranet, he describes himself as somewhat disengaged:

- R: How would you describe your use?
I-6: An occasional user.
R: What does that mean?
I-6: You enter it every day, but I wouldn’t call it regular use. You’re forced on it, and then you’re on it. Sometimes, I read the news stories. But there are too many sub-pages to obtain a complete overview on what is done everywhere, on a daily or weekly basis. If there’s specific information I need from a unit or department, then I search for it the search field. You don’t need to do that often. You have a lot of that already, on your e-mail, often in advance.

The Advisor administers a couple of rooms. One is called “BMS”, while the other is connected to one of the programs he uses, Corporater. He has added members to the rooms, including managers from various departments. The rooms have about 60 members. Relevant information has been uploaded to them, including news stories, manuals, and videos on how to use different software. The Advisor experiences that creating interactivity has been challenging. It is hampered because it is difficult to ascertain whether the rooms are used by others, due to *Jubel*’s embedded features lacking a function that would enable the administrator of a room to ascertain usage. There is no panel that can show numbers of visitors to his rooms. Nor has he seized the opportunity to follow other rooms. But his engagement has caused him to pinpoint a number of limitations, which concerns *Jubel*’s user interface and contradictory intentions on sharing. For example, the information shared in the rooms is already available and ready-made in other digital spaces. And in many cases, coworkers will tend to have it stored in their e-mail inbox. But there are other topics, which draw his attention, like his experience that the user interface and its embedded features are too complex and demanding to make sense of. He has some concerns about the rooms themselves:

- I-6: The challenge with *Jubel* is that there are too many rooms. It’s almost like we have a room for each employee. You have to click a link to get to somewhere. And then you have to go back again and click on a new link again, so it will be many rounds, just to get hold of the information you’re looking for. You don’t get the latest news from the Accounting Department by entering the Financial Department. It’s clear that it’s difficult to gather everything in one place to suit the needs of everyone.

This means that online navigating poses just one challenge, but another is a lack of motivation to engage in an online dialogue. The Advisor has rarely written status updates, something that he attributes to the absence of a high quality social stream:

- I-6: It’s related to [the fact] that I haven’t read anything worth commenting on. And, I haven’t read much stuff there either. I’m just an occasional user. You have the news feed and if you add something it disappears down the screen.

Sharing is discouraged when employees create a news stream that is incompatible with the expectation of a professional SNS, when the information is not evaluated as “relevant” to one’s work activities. Instead, users create a perception and an imagined community filled with activities associated with the private sphere, which this informant does not identify with:

- I-6: That the ski booth is open, a new employee at a high school, are stuff that do not concern me very much.
R: It’s so that the information published on *Jubel*, doesn’t concern your work?
I-6: Yes. Part of what is published there is not relevant at all.
R: What is “not relevant at all”? Can you give some examples?
I-6: I don’t remember quite right, but once it was a ski wax discussion going on over a longer period.

There are other aspects of the user interface he puts his finger on. He finds it challenging to understand certain terms. He has often asked himself if the shared information is only readable for him or for everyone. The user interface has too many options, which he tends to forget, as he does not use the social intranet that often. When he eventually uses it again, these have to be “relearned” each time.

The Advisor points to limitations in the social intranet’s search functionalities. On the one hand, he has filled out his profile and competences and tagged them with keywords, while on the other hand, he has used *Jubel* to search and retrieve information about his colleagues. But the thorniest challenge is that the implementation has produced difficulties in performing strategic searches or retrieving information. He has experienced that he gets many outdated hits when he searches. His theory is that no one adequately accounted for updating the old database with new ones, when they carried out the implementation:

- I-6: The biggest problem with the old intranet was that it had links to the information, which had not been “cleaned up”. When you clicked “annual reports”, you got hits to reports that were six to seven years old. Not the newest one. There were many “dead links”, which have not updated for a while.

The Advisor tells about an absence of an established sharing culture at his department. His department has published all the information they can share, but is in reality hampered by the fact that they do not have much to share. Instead, their work processes happen in closed spaces, where few professional ties have access to the working documents. The annual report is a product of such a process:

- I-6: Until now, when we work with the annual report, for example, it is a document from the Finance Department, it is worked on in the folder structure, not on the social intranet. We write what we need to write, and then sew it together into a document, and then we share it on *Jubel*, after it is approved. Based on my experience, we have few unfinished works available on *Jubel*. We only share finished and approved documents.

In sum, the Advisor has a high threshold for publishing digital items. In principle, they should first be “approved” and overviewed by a higher organizational authority and make their way through the CA’s internal quality management system before they are shared. The CA’s management structure needs somehow to be included in the sharing practice. To share “unfinished work” has certain risk and can cause misunderstandings:

- I-6: Things that are unfinished and not approved can create panic, when it is a different figure from what you think is going to be on paper. If we begin to rewrite the CA's economy and everyone can read that, there will be something new to most people. Many people absorb it, even when it is wrong. It creates a lot of "storm" in your organization, if it is not correct. Not everyone grasps that, that it should not be done, but it is work in progress. I can take an example from the corporate governance program, which has an indicator called "financial statements and budgets", which shows how much of a deficit / surplus we have to date. It is an indicator that gets its numbers straight from our accounting system. And when we updated the financial system, however, the indicator "froze" itself in Corporater and showed figures from November 2013. This is a completely wrong figure. We have notified about that and it is published on *Jubel*, but still I keep getting phone calls, that the figures are wrong.

End-user 5 – The manual user

This end-user story is about a female employee working in the Accounting Department. End-user 5 holds the position of Consultant. Her main responsibilities are collecting and issuing of invoices to citizens using the CA's welfare services. This work requires ongoing contact with various debt collection companies, as on an everyday basis she processes confidential economic information on citizens that have used the CA's dental services.

The user story "the manual user" displays a theme about the role performance of an *engaged* user, meaning that we learn about a different pattern than seen in the previous user stories. While the previous user stories hinted that super-users had little knowledge on how room members use uploaded information, we now gain insight on this. The Consultant is an active room user. She interacts in them on a daily bases, foremost by retrieving and finding information, a use that she claims has reduced her e-mail communication. In a sense, she is an example of a partial success, illustrating a user who has adopted arenas designed for online interaction and collaboration. But in reality, this shows a *change* in her online interaction with another source destination, which is a replacement for where she normally searches and retrieves information from. While she earlier entered search key words in a search toolbar on the old intranet, she now browses and reads uploaded documents in the rooms she follows on the social intranet to find the information she is looking for. Such a practice means that the Consultant interprets and classifies the rooms and the social intranet as a type of "manual", which she can open and browse to perform her work. *Jubel* is here embedded and sincerely used and part of her work surface. But she does *not* share digital items. This means that we find another employee who also draws up personal boundaries.

The Consultant is not registered with any personal user profile on any social media platform. She has disconnected herself from that domain entirely. She does not use it, in private or at work. This is a conscious choice. She is skeptical and explains that she rarely "stands first in line" to adopt the latest technology. But her closest social ties are on Facebook, something that has tempted her to register on a SNS. She sees that sharing and online social interaction can be useful. But she has resisted and only communicates with her family and friends by a single Google e-mail (gmail) account:

- I-7: I sit in front of a PC all day. When I get home, it's rare that I do something that has to do with a PC. A computer is used only as a necessary tool. I have a husband. We both share the same view on that. We're not on any social media.

Her work surface consists of different computer systems. These include *Jubel*, e-mail, an accounting database, a student database, and an electronic case management system. These are mainly used to search and retrieve information. Lync is also included in her work surface, but she uses that to stay in contact with close colleagues. The Consultant used the old intranet, but approached *Jubel* with skepticism, because it gave her the sensation of a social media platform. She interpreted and classified *Jubel* as “Facebook at work”, implying it would be an SNS where coworkers could socialize and discuss their hobbies, rather than a site where they address professional issues related to their work. But that changed, as it has now started playing a positive role in her work practice. She now sees benefits. She frequently uses *Jubel*, but her use has not changed, because she uses it the same way as she used the old intranet. *Jubel* is foremost categorized as a “manual”, which is used to search and retrieve information:

- I-7: I used the old intranet in the same way I use the social intranet today, like a manual, and by need, I extract the information I need from other places. Earlier there was a separate accounting program you had to log onto. That was a difference. You retrieved some old forms you needed there.

The integration of several computer systems to one work surface has been constructive. She now appears to be working more *in* the social intranet and handles her strategies for searching and retrieving published information in the six or seven rooms she follows, which she uses every day. Most of them deal with issues within accounting. Many are administered by her closest manager, who has the role of super-user. The Consultant is not a super-user of the rooms she follows. The rooms are useful in a number of ways. They have rearranged and economized her work. This means that the sharing practices of others have streamlined, facilitated, and formed information she uses directly to complete her work. While a person who shares a lot might not see the instant benefit of his or her online engagement, because of the absence of an expected reciprocal action, for example, she sees it differently. Although never in direct online contact with peers, she finds the information published in the rooms has personal value. The rooms appear to be turning into small online communities, containing information she needs and is constantly looking for. They fill vital “knowledge gaps”:

- I-7: For example, I’m working in the accounting system and I find out that I need to get hold of a manual or retrieve information on an account. I go on *Jubel*. There, I locate documents or things that are written about the case I’m working on. I’m a member of all the rooms that have something to do with accounting, a factor allowing me to know what we’ve posted and what others ask about.

The rooms are beneficial in other ways. They are valuable information depositories, where she can find quick answers, as they narrow down where she needs to start searching. Alternatively, she would have to search for the same information in larger web-based databases:

- I-7: Since they exist, they are easy available. They are part of a knowledge you can easily use. They are there if you need to be reminded about something.
- R: Can you specify this with an example, the kind of information that you consider to be useful in the work that you do?
- I-7: In accounting, there are clear definitions, clear rules for use, there’s a clear date of notice, for certain things. Things that are not so relevant one day, I often get information about in advance. But then I get questions from colleagues working in other departments, who ask about a deadline. What date is set as deadline for the final reporting? Now, I know where I can quickly get and give an answer

back on that. It's not necessarily that I have that knowledge in my head, but now I have good knowledge of *where* the answer is located.

The rooms help her in having an overview, but she has experienced that professional discussions in the rooms have served the same purpose. Colleagues have commented and responded to status updates. But she appears to be interacting in rooms related to her own field and using information shared by her peers in the department where she works, implying little interaction beyond her regular professional network. On the other hand, there has been a learning curve. And she has experienced it as a barrier, as she perceives herself not to be the one that adopts new technology first. But she completed the internal training courses and her learning curve has been part of a trial-and-error phase, combined with support from peers. She briefly attempted to perform the role as sharer and engaged on the social intranet. This is seen as challenging and associated with great personal risk.

She does not publish or share any content, but attempted commenting once:

I-7: I've commented on a case. It was just to try it. It was right after we had *Jubel* as a topic at a department meeting. It was a bit scary. And then I met someone in the corridor, who said, "Really, you've been active?"

This gave her unwanted attention, but it soon passed. After that, she has never commented, as it was not her "thing". But she reads status updates in her stream. There is a personal ambivalence towards that too, especially certain commenting practices. This can potentially have the opposite outcome on coworkers, as they can become disengaged:

I-7: When *Jubel* came, many commented. Then it was just too much like Facebook, on my part. If, for example, someone posted a photo of 10 to 15 people, then came all the comments about shoes, hairstyle, make-up, etc. It seems that I do not belong to that kind of medium, considering the type of organization we work in. I just faded out. I thought that this was just too much teen and Facebook. I'm a bit afraid to be part of that category.

Commenting on the social intranet is expected to have quality, in order to have value. She has experienced that in one of her rooms, which has had a personal learning value.

I-7: In one of the rooms I'm a member of, I followed a little discussion in an economic network. This is aimed at people who work with fiscal matters at the high schools. It turned into a discussion forum, questions were asked, many commented, it was interesting to see how the conversation developed, which was almost like sitting in a meeting and talking. Some bickering, a little bit repetition. You discover a topic that several are working on. But I must say that my use limits itself to retrieving information. It's our super-user in our department who ensures that our information is published.

This informant values privacy in private channels. She reports that she sends fewer e-mails and uses Lync to stay in contact with coworkers. It seems that she interacts with people who work in her own department or in the same field as herself. She collaborates with colleagues who have accounting responsibilities in the CA's welfare units, but she appears not to have connected with other coworkers beyond that turf. But there is much communication within that domain. This means that her interaction on the social intranet seems not to have led to expanding her professional network internally in the CA. Despite this, the Consultant has

certain criteria on what could be shared, although she has never been an active sharer. She has a definite reluctance' to publish "unfinished work" and believes that it should be approved by her closest manager before it is made available to others:

- I-7: I'm not so keen to publish "work in progress". If something is to be published, it should be correct, completed.
- R: Why?
- I-7: Say that it's the way I am.
- R: Is that to avoid misunderstandings?
- I-7: Yes. I think it's like that. If I am to work on a case, I want to have the final answer before I publish it. I can give you an example, which applies to CA's dental clinics. When they want to send over a thing, in the process, things that go to debt collection arrive on my desk. I have not posted anything during the process, because I wanted my manager to look at the draft, along with other managers too. It's the way that I work, the way I think, the routine should be completed, before any dentist gets access. Considering that you want to have a unified management involved, they have to see the final result first. Then time passes, and we have a routine, we end up with draft C and D, until we finally land on something. It's my way of thinking.

And there are good reasons for so doing. For example, she experienced once that documents they published were adjusted, suggesting that sharing raises dilemmas:

- I-7: We hoped that we could have a few private rooms, so that only we in the department could use them. But after a while, we realized that others can go in and read and see what is said. They can also go in to comment, say something else. We have a thought, that forms, which were prepared in the Accounting Department, are correct when they are posted *Jubel*. And that it's important everyone should use that form. But then we discovered that one unit had taken a form, worked on it a bit, and adapted it to fit their unit, and published a new version on *Jubel*. That was an accounting manual, which should be quite absolute, as it is important to achieve a uniform way of reporting, so others will follow it. Then it's wrong when 22 units enter and modify some of the instructions, to customize their own use. You lose the original. We were quite surprised and unhappy when we discovered that.

End-user 6 – The listener

This end-user story is about a male Legal Advisor who works in Law and Acquisition Department. He is a trained lawyer by profession. His main responsibilities are legal interpretation and advising. He supports the CA's various units on such matters. His work day consists of organizing and finalizing public procurements, especially considering potential legal implications for contracts the CA signs with suppliers. Public procurements are routinely administered as project groups and are made up of coworkers from different departments, where he works and is part of larger task forces. Sometimes these are organized with colleagues from neighboring municipalities, involving collaboration between public organizations across institutional structures. He has outward contact with his peers.

The user story "the listener" reflects a theme about an employee's role performance, which is related to his professional background. Due to his legal training, he is regularly contacted by colleagues who have many questions on judicial matters. He often sits down with them and

listen to their case. He is a sparring partner. This listening performance starts with colleagues randomly stopping by his office to talk with him – “drop-ins”:

- I-8: People come walking by. It's very much that. They say, “I have a problem”, “Can I have a chat?” That generates a lot of work later on.
- R: You have a lot of drop-ins?
- I-8: Yes, very much. Those we support or serve, work here at the CA. They first need a chat. They don't know where to start. I think this is a bit special for us legal advisors. We're involved when they are uncertain or when there are many challenges in their work.

The Advisor shares similar user experiences, as we have seen in the previous user stories. He draws up social boundaries across several trajectories, which are traceable to how he uses and interprets various social media platforms. He does not publicly engage on any social media platform and essentially sees them as belonging to the private sphere:

- I-8: I don't use them at work. I'm a civil servant. I can't promote political views. I think that's incompatible with my role as a civil servant, who works with politically-driven activities.

But he is present and is registered with user profiles on three SNSs, Facebook, LinkedIn and Twitter. He uses them differently and has developed his own user patterns suited to their specific intentions and needs. He conceives himself as a passive user or “reader”, occasionally sending links to digital items to online contacts. He registered on Facebook as early as 2006, a year prior to its public boom. He frames his Facebook online interaction as “scrolling after fun stuff and setting likes”, implying that it belongs to the private sphere. LinkedIn is seen as a “CV database” and has a clearer professional work value, but he does not post entries and seldom engages. He has a positive perception of Twitter, where he only reads the online news feed. Twitter is used as a “listening post” and is seen as useful, as public Twitter conversations can be informative and addresses public debates, which interests him and is relevant to his work:

- I-8: I got the impression that people who had something to say, interact on that arena. People who say something interesting, who contribute. It's not particularly interesting to read the comments field below the newspaper articles. The people who are on Twitter are often more reflective. One gets the impression of that.

He has used other social media platforms, a file hosting service and a web-based word processor or an online office suite solution. He has been part of initiatives that used Dropbox and Google Drive. These were used because of a lack of a joint ICT infrastructure with the municipalities located in the same county as the CA, a factor that prevented efficient collaboration. This has surfaced as an issue, because they needed to organize and coordinate public procurements practically, which his department does very often with neighboring municipalities. As part of this effort, the CA has taken on the lead role as the “public buyer” and lead organizer, meaning that the CA acts on behalf of *many* municipalities, in order to achieve greater discounts and benefits for all. This work requires collaboration with peers in other public organizations. In that regard, one can expect that colleagues in municipalities can have different needs and competences, hence many persons voice different opinions and needs. This will ultimately involve long e-mail exchanges and many attached documents, which can lead to losing overview. Instead of sending many e-mails with attached large documents back and forth, they used Dropbox or Google Drive to make a work process more efficient and economical for everybody:

- I-8: We work with the municipalities. We created a Dropbox account, because we don't have the same e-mail system or share the same case management system.
- R: Have you tested that?
- I-8: Yes. I've used it. It's challenging. You don't get Dropbox solutions on the PCs here. The IT Department thinks it's unsecure, [lacking] information security. We need tools to do our job, so we ended up by defying that a bit. And we downloaded the software to our PCs. Sometimes it happens that we use Google Drive, when working with external partners.
- R: You have used that solution?
- I-8: Yes, I have used it, to share documents more efficiently than by e-mail, before they get too large.

His work surface consists of various ICT systems, *Jubel*, e-mail, El-ark and Agresso. And he briefly used the old intranet, which he used to get an overview and familiarize himself with the CA. He conceived of the old intranet as a "manual", foremost used to retrieve and search for information, but he interprets that it is not so different from the current social intranet:

- I-8: It was a collecting base, in the same way that *Jubel* is now. *Jubel* is organized in more or less the same way, allowing more user interaction. There are opportunities, almost a bit democratic, with embedded opportunities to comment. Visually, you can feel it looks like a social media.

The Advisor has completed the *Jubel* assignments suggested by the top management. He created and filled out his profile and tagged his competence with relevant keywords. And because of his legal professional background and contact with peers outside his department, this is reflected in his engagement with rooms, as he follows approximately 10 of them. These include, among others, transportation, law, acquisitions, information safety, and privacy. These are used for acquiring detailed knowledge on what happens internally in the CA, implying that room membership can be a source of information:

- I-8: We lawyers work across several areas in the CA. Suddenly we have to work with an unknown field. We try to stay updated on what happens.

His reading approach to social media may also resurface in how he uses *Jubel*. He reads status updates, when a news item surfaces in his news feed and also consults the rooms, when new information is shared by others. But he explains that he is not a systematic reader and clicks when he regards something as "interesting":

- I-8: I don't use it systematically. If there is news, that's what brings me there. Also if there has been a recent activity in the room, like a seminar or if someone has posted a presentation. When such things have been shared, it gets into my feed and I enter to have a look.
- R: Do you read it?
- I-8: I often consider if it is interesting. If it's that, I read it. I don't have any standardized routine to check what has recently happen in my rooms.

The listener performance is reflected in his commenting practices, which are sparse. He has attempted commenting, but reckons there have been few professional debates. He also registers that certain departments publish more information than others:

- I-8: It's rare that you see professional debates. You can also see that some departments publish their minutes, discussing them. They publish minutes as a comment. They practice transparency.

The Advisor explains an absence in online engagement resulting in little sharing. He explains this as due to the fact that the social intranet has yet to be shaped and become institutionalized:

- I-8: I haven't been good at sharing, perhaps for technical reasons, but also due to [the fact] that the channels have not established themselves.

Instead, we find the case where sharing appears to have been formalized as a regular assignment. It has been ascribed and delegated as a defined responsibility to be carried out by a super-user or coworker in his department. Such a factor can imply discouragement or relief from sharing:

- R: So is it that you are the one that shares a lot of information?
I-8: No. In our department, for that which should be shared, or anyone who felt to share, there has been a super-user. It's not that old, *Jubel*. We learned a lot in the beginning, this new, about how to use it as a tool. And then it diminished and one became a bit more passive. I think we have used it for less than a year.
R: *Jubel* has been ascribed to one person?
I-8: Yes. And perhaps the competence on using it too. We haven't been good enough to share. Perhaps it has not been developed well enough either. It's not that hard. It's organized with a user interface, so that the Facebook generation can use it, more or less. I have understood it that has been a bit difficult, for those on the other side of the table. I've just noticed that we don't use *Jubel* very much, but we that we return to using the old network, to convey news and stuff. This means e-mail.

This means that much of his online interaction still remains in the e-mail domain. The intention behind *Jubel* was discussed in his department. Several themes emerged. They interpreted that it dealt with changing the way they worked, foremost by building and sharing their knowledge across internal organizational structures. The Advisor sees clear benefits here, as it can be used to create internal networks around a professional interest:

- I-8: It might be that you create a professional network, which can be used to bridge over established organizational structures. You can gather people who work with acquisition. We have employees in the municipalities and within the CA, who work in their department, which has overall responsibility for public procurement, responsibility for the implementation of smaller tenders. They know that we exist. But it is very much about traditions and personal beliefs on whether one wishes to collaborate. *Jubel* can help with that, if one creates a professional room, which you can get support, for example, when you call people to take a course, you can create a network and a community between those who are interested in the same area.

Another theme was connected to what types of challenges a social intranet might pose in their workday, which foremost involved making sense of how to rearrange their strategies for searching and retrieving information:

- I-8: We thought, “How are we going to find our way through it?”, as the old intranet was based on searches by using keywords. That was the first objection. Before, we used the file structure. Now we should go over to use rooms, where everyone would be members and pay attention to what happened there. When we are searching for something, then we are supposed to go to the search field. We should not go to the file structure and search there. That was the one we talked about, that this is now different.

The most daring challenge has been interpreting and adopting sharing as a practice. The Legal Advisor interacts and shares in professional networks. Other advisors with law training work in the CA. They meet face-to-face and share their experience online, but this happens on e-mail. Performing that in public domain is something different, however. Sharing appears to be associated with a degree of risk. The Advisor argues that there are different strategies that should be considered when sharing information on the social intranet. In principle, one should consider the nature of the information and make assessment from that. Some could, for example, be reviewed by one or several managers. Other times one can use other criteria, like making information generalized or anonymous.

7.4 Summary

The intention behind this chapter has been to contextualize the fourth local model, *the 2.0 Social Intranet Portal*. The experience of the dissertation’s fourth actor has been examined, a sample of employees working in a CA called the Lima Organization. I explored a case story illustrating how embedded ideas in social media were constituted and translated into an organizational context. This was completed by analyzing the user experiences of a top-management initiative, which dealt with implementing a social intranet that embedded a variety of technical features enabling information sharing, which was called *Jubel*. The objective behind the implementation was to improve internal communication, simplify employees’ work surface, and reduce internal organizational boundaries, as part of a goal to bring organizational change and development. I tracked how various employees interpreted the initiative and the meaning of sharing and related that to their use of *Jubel*. I paid attention to their different involvement in the implementation and how they negotiated boundaries and defined their role performance, which were portrayed in personal user stories. This argument was covered over the chapter’s four parts. The first part linked my model to theoretical concepts used in organization studies and social anthropology to understand how people interpret technologies and how boundaries are constituted by negotiation. The second part outlined the tendency for organizations to implement social intranets. I described how this was also a factor in the Lima Organization. The third part explained the user experiences of the implementation of *Jubel*. The concrete findings from my analysis are discussed in the next chapter.

8 Conclusion

This chapter ties together the subject matter analyzed in the preceding chapters, which means addressing the final statement of my thesis, the conclusion. This is covered over the chapter's five parts. The first part recaps the study's research objective. The second part outlines my empirical findings. The third part addresses the study's research contributions and limitations and gives suggestions for future research. The fourth part provides recommendations for how practitioners can use social media. The last part asks the question what social media can represent, which is concluded in light of the question; "What is this a case of?"

8.1 Part I: The research objective behind the study

In 2011, one of NTNU's strategic research priority areas, *ICT in the Norwegian Public Sector* (NPS), initiated the foundation for this study. The research program organized a call inviting graduates to design research proposals for studying the potential implications of social media in the NPS. I answered it by proposing an in-depth study on how social media is used by persons working in the Norwegian K-12 education system and municipal sector. I suggested researching the subject by using an explorative and inductive approach and by applying social scientific qualitative research methods. My research design proposed that choice of theoretical framework and research horizon would be selected during the progression of the research process. Further, the research goal has been to analyze aspects of social media, happening *inside* organizations, which were assumed to be created as an outcome of social media's arrival in Norwegian *society at large* in 2007. This occurred because Norwegians started to engage on social media. These conditions were assumed to diffuse into organizational life by initiatives performed by actors affiliated to organizations belonging to the NPS. This involved having an assumption that social media is part of an *ongoing external socio-material environment* – "happening out there" – that influences the *internal activities and priorities in organizations*. Social media has been analyzed as a new *equivocal* and *abstract cloud-technology*, requiring to be managed and organized by interpretation and sensemaking.

To frame this latter aspect, the research goal focused on addressing particular conditions, opportunities and limitations offered and generated by social media. I argued that social media had become *user-driven*. This followed as a consequence of changes in the material properties of the technology, a factor allowing humans to easily organize and coordinate activities in new ways. Social media gives humans the possibility to build, institutionalize, and organize social networks and create organizations by initiatives they carry out. I argued this has been a tendency in *society at large*, as we saw examples of how humans started to create social media phenomena that combined acts of individual enactment or mass collaboration with the digital participatory culture of the Internet to produce *emergent social structures*. These social media phenomena were claimed to be given clearer meaning or "social life", when challenging the supremacy of established practices and institutional logics. Confronted with this, I maintained that social media challenge and re-write the ways that ICTs are administrated and organized in organizations. This was related to how adoption and implementation of social media increasingly takes place "under the radar", as actors can "import" and start using the technology beyond the control regime that regulates ICTs. In addition, since there is a tradition in the implementation of ICTs in organization that end-users use technologies in unexpected ways, the arrival of social media could contribute to the chances that actors will take the initiative to create new organizations "under the radar".

These conditions suggested a need for using *decentralized perspectives* to grasp the adoption and implementation of social media into organizations. This meant using another “research lens” and putting emphasis on how technology adoption can emerge from actor-motivated grassroots initiatives from inside organizations. This called for using *bottom-up perspectives* and *top-down approaches*. A bottom-up perspective was used as an analytical procedure to piece together an organizing emerging from local use of social media initiated by actors having a first-line position in organizations, while a top-down perspective was used to follow the outcome of a top-management initiative, by performing a stepwise design of breaking down the assumptions of an organizing to gain insight into the interpretation and expectations of its distinct compositional units. The relevance of these perspectives pertained to using, when humans decide to *interpret* and *enact* their use and understanding of a technology in established *organizational contexts*. Consequently, when actors use social media and reshape the user-generated content to fit a context and ride the Internet’s participatory culture, definitions like “Web 2.0 + User-Generated Content”, as suggested by Kaplan and Haenlein (2010), diminish in weight. To understand how actors socially construct new genres and social organizations by their actions, I argued we have to pay attention to processes of contextualization.

To realize this research goal, I created a research perspective that aimed at showing the adoption and implementation of social media from the point of view of an actor who interacts from inside organizations. This was illustrated by examining the outcome and processes of a set of initiatives performed by humans in selected organizations. The initiatives were analyzed by combining bottom-up and top-down perspectives. The initiatives showed how humans translated, organized, constructed, and enacted organizations around social media, which were based on their understanding, actions, and interpretations of social media and connected to the organizational context in which they interact. The initiatives were characterized by how the actors imported or implemented social media and its embedded ideas onto the turf of an organization and initiated an activity or embedded social media into an existing practice. From there, the actors formed processes resulting in the social constituting of a successful or failed organizing. Common to all the organizations are how they were linked to social media and would have been more difficult to realize if the technology were absent. The realities of the local organizations became clearer – or got a “social life” – when they contradicted or aligned with organizational measures initiated by an organization. I referred to the organizations as “models”. I used the term as an analytical instrument to give an empirically founded and holistic framework to illustrate how actors use, interpret, and translate social media into their local organizational contexts by initiatives they orchestrate. The model concept was used to describe the potential outcome and processes emerging from the social constituting of the actors’ use and interpretation and recurring engagement with social media in organizational contexts. The models were used to create a user perspective on use of social media in organizations.

The study contextualized how social media was used and interpreted by *four* actors who interacted in *two* organizational contexts, a *K-12 education system* and a *public administration*. The four actors were affiliated to *three* organizations, framed to be part of the NPS. The actors were: (1) a group of students and (2) a teacher, attending a high school, called the Alfa Organization. These actors belonged to the educational context. The actors in the public administrative context were (3) a group of municipal employees who took the initiative to form a competence group in social media, a beta group, in a city municipality, named the Echo Organization; and (4) a group of county municipal employees working in a county authority, called the Lima Organization. A bottom-up perspective was used to analyze the use of the students, the teacher and the beta group. A top-down approach was used to examine an initiative

that included a group of county municipal employees. This was outlined in relation to events happening from 2008 to 2014. An overview of data is displayed in Table 8.1.

Table 8.1 Overview of models and concepts applied to actors.

No.	Actor	Local Model	Pseudonym	Organization	Organizational Context	Initiative	Year	Perspective	Authors
1.	Students	Shadow Student Learning Ecology	The Alfa Organization	High school	K-12 Education System	Bottom-up	2012	Learning Ecology Connectivism	Barron (2006) Siemens (2005)
2.	Teacher	Authentic Learning Situations					2011-12	Technologies-in-practice Reflection-in-action Reflection-on-action	Orlikowski (2000) Schön (1983)
3.	Beta Group	Relation Platforms	The Echo Organization	City Municipality	Public Administration	Top-down	2008-12	Genre repertoire Reflection-in-action Reflection-on-action	Orlikowski and Yates (1994) Schön (1983)
4.	Employees	2.0 Social Intranet Portal	The Lima Organization	County Authority			2014	Technological frames Ethnic group of Boundaries	Orlikowski and Gash (1994) Barth (1969)

To show the dynamics of the models, this was portrayed in four case stories. Each case story explored how each model was linked to use and interpretations by actors in the organizations in which they interact. Each model was analyzed in light of an initiative, illustrating how the models “worked” in organizational life. In Chapter 4, I analyzed the ways a group of students self-organized formal and informal learning activities by using social media. This was analyzed in light of an educational initiative intended to boost students’ digital competence, exemplified by providing students with laptops that are to follow them throughout their studies. The organizing emerging from the analysis was called “The Student Shadow Learning Ecology”. In Chapter 5, I explored how a teacher organized her classes by using social media, to conduct foreign language training in English and Spanish in a high school setting, a learning design that became the model “Authentic Learning Situations”. This model was explored in light of a print technology, which has played a major role in defining how teachers organize their work practice, the textbook. In Chapter 6, I examined how a group of employees working in a city municipality took the initiative to work professionally with social media and formed a competence group in social media, which they named the Beta Group. I analyzed how the members tested, experimented, and reflected on use of social media and imported aspects of contemporary Internet culture and adapted them to organizational discourses, a knowledge production process that was subject to changes as the members interacted with municipal priorities and activities. The model emerging from the analysis was the group’s definition of social media, “Relation Platforms”. In Chapter 7, I analyzed how the top-management in a county authority administration decided to replace its intranet and implement a new social intranet portal after a public procurement, inspired and to be modeled after a professional SNS. I examined the employees’ interpretations and expectations of the social intranet and an organizational discourse encouraging employees to share and engage on it, an analysis resulting in the model “2.0 Social Intranet Portal”.

The study needed to be related to a research tradition, which I evaluated as possessing concepts suited to describe the models and my research goals. Another goal was to fill a gap in a relevant research horizon. To fulfill this, I applied a research tradition in organization studies, which has explored the role of technologies in organizations. I chose it because of calls from scholars. They urged for filling a pressing knowledge gap, as the role of technologies in organization is understudied (Orlikowski & Scott, 2008). This condition included the role of social media in organizations, as scholars argued that we have limited knowledge on how social media socially *constituted* and *embedded* into organizational life, a facet I saw giving legitimacy for using a model approach (Treem & Leonardi, 2012). Based on it, I created a research lens that expanded and combined concepts developed within what Leonardi and Barley (2010) identified as *interpretation* and *enactment* perspectives on technologies in organizations. I used research perspectives that explore how humans *interpret* social media by drawing on previous frames, schemas, and experiences when using the technology, which involved focus on the cognitive structures that emerge when people use the technologies in organizational contexts. I was also motivated by using a *practice lens* to examine how humans use social media and understand the evolution of practices emerging from its use. In light of that, I suggested that researchers could start developing and use empirically *model-based technology approaches*, which emphasize the strategies and choices actors use to manage and organize the processes and outcome of recurrent engagement with a technology that manifests as equivocal. I suggested that we could view this from an *actor perspective* or from those who use the technology as part of everyday life. To further my argument, I used concrete analytical concepts to analyze the four models. These are also displayed in Table 8.1.

The thesis has been driven forward by a single research question, which has been to explore the ways that social media makes its way into organization life by human initiatives. To frame it, I asked the research question: *How is social media interpreted, used, classified, and what kind of new practices can we identify in the public sector?* The main research question could be summarized and divided as follows:

1. How do the actors evaluate, classify and, define social media in organizational contexts in which they interact?
2. What types of user patterns can we find?
3. To what extent is social media congruent with organizational practice?
4. In what ways do social media challenge organizations?

To answer the research questions, I will discuss them separately in the following subsections, which focus on the research results. Subsections 8.2.1 to 8.2.4 will answer research question 2, while subsection 8.2.5 will concentrate on discussing research questions 1, 3 and 4.

8.2 Part II: The research results

8.2.1 Research findings from the student case story

What types of social media user patterns can we find from the student case story analyzed in Chapter 4? The research findings are summarized and displayed in Table 8.2.

The most important finding concerns how high school students *themselves* take the initiative to self-organize formal learning on an SNS, Facebook, which is sanctioned by an organization. This is also contradictory, as the students perform this in light of an educational initiative aimed at boosting their digital competence.

The data analysis shows known and emerging social media user patterns among adolescents. All the students use social media for socializing and are registered on one or several social media platforms. The students have a strong online presence. Here, Facebook takes on a leading role as the central and connecting hub, as it is the important platform they use every day, which is combined with YouTube, Twitter, gaming and blogging. The analysis showed that it is common to combine social media use with reading of regular web sites. In terms of user engagement, there are forms of participatory divides and various degrees of user involvement. The analysis uncovered that a majority of the students have a Web 1.0/read-only rather than a Web 2.0/read-and-write relationship with social media. Students are passive readers or consumers rather than being active prosumers or contributors of online content in an online community of practice. This is reflected in their ways of communicating, as many students exercised self-censorship, so that widespread online sharing practices are limited. This creates a dual communicative practice where they use their social media feed as an information channel for monitoring, while they prefer to communicate on chat software with trusted contacts they know from their off-line world, sites where they communicate a great deal. The data suggests that few students are regular content-producers. Only four out of 26 students had published user-generated content: a male student produced YouTube videos and three female students blogged. These findings are not to suggest that students decline from online interaction. The students appear to have gone through a personal testing or socialization phase, after initially being a “deep” or engaged user to becoming a passive and “shallow” user. This is demonstrated in the decline in online interaction on Facebook. Many students explained how initially they “liked” and wrote status updates, but over time their usage changed and to only watching pictures and communicating with close ties in chat rooms. Facebook’s declining popularity is reflected in that students started questioning the value of having large networks. Some students started downsizing or unfriending their Facebook networks, which on average counted 300 to 400 connections. Other students reported moving on to new SNSs or microblogging services like Twitter. We find that students had strong criteria on whom they included in their Facebook networks and it was not uncommon for confirmation of new ties to be based on a prior relation from the off-line world. The findings show that students communicate on Facebook groups and use them as coordination sites to organize illegal taxicab operations or peer-to-peer driving. The analysis showed that use of social media is gendered, as reading and writing of blogs is predominantly a female activity, while gaming is a male domain.

The case story showed that the students used social media to self-organize formal and informal learning activities. The analysis found that 12 of 26 students used social media to self-organize formal learning activities, a network practice happening beyond the supervision of their teachers. This proves an adoption of social media into school activities, which is organized around Facebook groups, Skype and Google Docs. Facebook groups are used as a coordination site, to facilitate simple informing about school activities and sharing of tools for self-study, which are combined with the collaborative word processor software Google Docs. Here, Facebook groups are used as discussion forums. The chat software Skype is in some way used to carry out simple goal-orientated activities. The study found differences in *which* students use social media to organize and perform formal schoolwork. The findings show that social media is used for constructive and non-constructive learning purposes, as students use it to collaborate or con homework. Female students use social media in a constructive way, in terms of showing reliable study habits. Students in general or academic studies embed social media into their studies, while this is not the case with students in vocational learning. The data suggests that students who traverse and interact across several social media services and are content-producers are likely to show positive study habits, which in my data prove to be female students. On the other hand, we saw that social media is used to pursue informal learning activities. Nine

of 26 students reported using YouTube for informal learning, mainly maintaining and learning about their hobbies. The data analysis indicates that the YouTube world is a male dominated turf, where vocational students lead as prime users. The analysis showed that male students use YouTube videos as a means of informal learning. They use YouTube videos for instruction on how to carry out complex practices, such as playing musical instruments and online games, although female students may do the same. The case story finds that use of YouTube videos goes beyond simple retrieval, as students connect retrieved information to practices organized around established personal socio-cultural experiences.

Table 8.2 Empirical findings from the student case story.

Empirical findings from the student case story	
General findings	
Students take the initiative to organize formal and informal learning activities	
Particular findings	
General user patterns	Formal learning
Strong online presence	Facebook groups different roles
Combine social media platforms	Student bulletin board
Blog, FB, Twitter, YouTube, gaming, Skype	Discussion forum of school projects
Strong self-censorship	Coordination of school assignments
Communicate in closed online spaces	Sharing of cram sheets
Strong selection of online ties	Skype
Many passive consumer, very few prosumers	Sharing of homework
4/26 students made user-generated content	Google docs
Online engagement from deep to shallow user	Co-authoring of school projects
Gendered user patterns	Student patterns
Female students mainly use and read blogs	12/26 students to formal learning
Gaming a male digital space	Distance between student and teacher
Facebook a “main highway” for social media use	Female students use in a constructive ways
Decline in Facebook’s popularity	Informal learning
Facebook groups used as “private taxi site”	Youtube videos
Descaling of Facebook networks	Learn hobbies – music, gaming and photographing
300 – 400 Facebook ties on average	Male orientated
FB friends with off-line tie	9/26 students used for informal learning

8.2.2 Research findings from the teacher case story

Moving on to consider the social media user patterns from the teacher case story examined in Chapter 5, there is a number of research results. These are displayed in Table 8.3.

The most important finding is that the case story proves that it is *possible* to organize classes by use of social media in foreign language training in a high school setting. Moreover, this can be completed over an extended period of time. Furthermore, it is achievable to decouple from a textbook learning design and embed a social media learning design to national *curriculums* in distinct subjects, which I believe is an important lesson. The case story shows that the common realities with teaching in schools – that students can enter class with different motivations, expectations and have different preconceptions about social media – will influence the outcome of social media learning designs. This illustrates that attempts to create a learning environment based on using the World Wide Web, social relations, reflection, sharing, interactivity, and participation, as strategies to acquire knowledge is a highly *demanding* and

complex way of organizing learning and education. In addition, when students are socialized and approach such a learning design from a *linear textbook framing*, this requires additional scaffolding strategies from an educator's point of view.

Table 8.3 Empirical findings from the teacher case story.

Empirical findings from the teacher case story	
General findings	
Possible to organize and teach with social media from a long-term approach	
Can use a variety of social media applications	
Requires considering social aspects, contexts and social situations	
No “standardized recipe” can be implemented	
Particular findings	
Requires different planning and organizing	Impact on classes
Regular monitoring and choice of social media	Different acceptance of learning design
Strategy for creating knowledge	Learning design accepted in Spanish class
Embedding competence goals from curriculum	Partial success in English class
Create meaningful learning activities	Blogging accepted differently
Outcome of learning design	Blog project success in Spanish class
Difference between design and outcome	Blog project failed in English class
Limitations by language skills of students	Male students “leaders” in Spanish class
Requires adaptations while teaching	Male students “refuse” in English class
Bounded by the progression of textbook	Students differ in production outcome
Work with social ties in the classroom setting	Publishing curve has “take-off” and “drops”
Must create positive classroom atmosphere	Youtube
Essential to eliminate student misbehavior	Trigger and motivate to learn in both classes
Learning progression has peaks and drops	Technological framing
3 – 4 months before learning settles	Students framed to Web 1.0 than Web 2.0
Different learning progression of two classes	“Print-orientated”
Second half the most productive period	Student performance
Teacher has to perform a lot of “pushing”	Students do not perform more than they have to
Changes in learning strategies	Differences in being self-organized
Omits pointing out errors in student work	Differences in collaboration
Learn to write texts from a long-term perspective	Variance on working with info beyond retrieval

The case story finds that this must be outlined *before* and *enacted during* the progression of a social media learning design. This learning design thus requires different planning and organizing than would a linear textbook-learning approach. This planning and organizing starts with a *cognitive decoupling* from a learning process which is based on direct transferring and reproduction of knowledge, but must now be organized and based on a network logic or a node oriented framing, where information is distributed and embedded from multiple sources and reassembled by a reflection process between learner and educator. The case story finds that the teacher used four strategies to achieve this goal. Replacing a linear textbook learning design with social media services demanded: (1) an ongoing monitoring of the educational technology landscape and construction of a “social media tool kit”; (2) the composition of a clear strategy for learning to produce knowledge; (3) a strategy for integrating the competence goals from the national curriculum; and (4) a plan to create meaningful learning activities. The end-result of

these scaffolding strategies involves the introduction of a complex and theory-driven learning design, which indeed suspends the artificial boundary of the classroom setting and includes the realities and logics of the Internet.

Therefore, the case story finds that there is no “standardized recipe” for creating a good social media learning design, which can be directly implemented and accepted by students. On the other hand, this has to be *adapted* when *enacted* in practice and be part of an ongoing process following the progression of a school year. This means that when implementing a social media learning design, the case story finds that the teacher had to adapt and fit a variety of scaffolding strategies to particular learning situations, while interacting with the students in the classroom setting. Moreover, they have to be adapted, enacted and improvised, according to the level and motivation of the students. Looking at the various stages in the implementation phase of the learning design gives insights into this matter.

During the two first months, called the “*introduction phase*”, the analysis established that the teacher worked with creating a positive learning atmosphere. The teacher bonded with her students in the Spanish class in academic studies and the English class in vocational training. Creating trust in ties and having a positive classroom atmosphere were seen as imperative to working digitally. The teacher had to work to remove incidents of student misbehavior and overcome low student motivation, which had to be accomplished by individual student conversations and orchestration of class sessions to deal with bullying. This period allowed her to identify the students’ technological framing. The teacher established that students are digitally skilled, but not at the level of working with Web 2.0. The students were more attached to a textbook tradition and approached the Internet as *readers*, rather than online *contributors* of digital content. Few students had been online contributors and they were skeptical about working digitally with formal learning activities. The analysis found that the teacher identified this and responded by motivating her students to work digitally. The analysis finds that the learning design has limitations, as the teacher is bounded by the language skills and language progression of the students, in addition to being tied to the content and structure of the textbook. For example, the teacher readdressed the ways she performed her teaching strategies. She identified that students struggled with writing proper English; hence, she omitted correction of grammatical errors and focused on writing and structuring academic texts.

The third month of the implementation phase, called “*challenges in stabilization*”, continued to show the challenges the teacher met when trying to institute her learning design. The analysis demonstrated that the teacher still had to work with improving classroom culture and motivate her students to use social media and to participate in her learning activities. The analysis found the emergence of recursive patterns. This involves the start of the progression of two different learning curves in the teacher’s classes. It became evident that the students in the Spanish class were capable of working independently and were self-organized, while the teacher met resistance among the male students in the vocational class. This resulted in terminating one of her learning activities, the blog project in the English class. The teacher faced challenges in getting her vocational students to reflect on news material they discussed in class, which was part of the learning activity “In the News”. This learning activity demonstrated that the male students were good at searching and retrieving information, but lacked the ability to connect information to a larger context. The analysis showed that the teacher initiated a collaborative video project among the vocational students, aimed at teaching them the art of collaboration. This learning activity indicated that resourceful students completed the activity, while students with low motivation struggled to be self-organized. This means that the students differ on how receptive they are to work digitally, as the students in academic training are associated with “Web 2.0”, while the vocational students are more loyal to the textbook. This phase established

that in order to work and interact “online” considerable resources have to be invested in “off-line” ties, in the social, before there is an acceptance of working digitally. This has to be first cemented in a safe and positive classroom environment and thereafter be “enlarged” into the social media landscape.

The fourth month, called “*the unexpected enabler of audio-visibility*”, showed recursive patterns, but was characterized by *breaches*. The social media learning design was enacted and socially instituted differently in the two classes. In the Spanish class, the students worked and there was a stable learning environment, as the teacher could work with each student. These students are self-organized and complete their assignments. In the other class, the learning environment fluctuated, as the teacher’s gender emerged as an issue influencing her classroom management. The data analysis found examples of how the teacher was forced to enact strategies and fit them to unexpected and uncontrolled learning situations. For example, the vocational students did not submit their schoolwork, although they could submit it on the school’s LMS or by hand writing. The teacher was forced to return to work with the textbook, as in some lessons she gave up working digitally and only used the textbook. There are other limitations in her learning design, which are dual. On the one hand, there were signs that the vocational students were willing to engage and discuss the news, while on the other hand, the teacher experienced that they lacked the important contextual pre-knowledge, making them partially uncritical about the information they retrieved. This phase demonstrates that use of audio-visual social media software is to be the start of a successful user practice, involving recursive use of YouTube videos. Such uses will prove to be a positive factor, which can trigger and motivate students to engage more directly in learning processes, something that applied for both classes.

The fifth month, called “*the half-way assessment*”, demonstrated *changes* in the enacting of the learning design. The teacher made an assessment of what she had managed to complete. She established that the classroom environment had improved. It was now seen as positive to be present in both classes. Teaching the vocational students reading strategies on how to critically evaluate retrieved web texts and place them against larger contexts by reflection to gain insights, proved to be demanding. The blog project was evaluated. This showed that the students in the Spanish class published their assignments, while in the English class it had been aborted for two months. The interviews uncovered that this was the first time the teacher had experienced rejection of blogging. The teacher explained this in terms of the underrated power of social media – with which the students were assumed to be more familiar – and an inner-self policing of the students. This involved returning to work under a textbook learning regime. On the other hand, many male students in vocational learning did not submit their assignments, which meant that the teacher had to send letters of concern to their parents. Written submissions were essential for grading, but evaluation of the students’ work proved to have improved since start of the school year. This was viewed as positive.

After six months, the analysis entered the “*turning point*” phase. The analysis showed that the model had become standardized, meaning the arrival of new challenges that had to be managed by enacting teaching strategies. This was demonstrated by the settling of a learning environment in both classes, giving unexpected student behavior. Incidents of student misbehavior were virtually non-existent and the teacher met *silent* classes. Instead, she worked with creating conditions for increased sharing and engagement by students who were now perceived to be reluctant to engage any more than they have to. This reluctance is explained in terms of them having received their first grade, which marks where they adjust their personal goals or ambitions. The analysis demonstrated that the teacher had challenges in obtaining a foothold for a standard of learning. She tried to motivate the students to reflect more and be creative, but

this was contradicted by the students' unwillingness. The analysis suggested that students rarely perform beyond their own ambitions, which leads one to conclude that students are still tied to the textbook. On the other hand, the teacher used YouTube videos, which proved to be positive. YouTube videos triggered student engagement. Experience proves that students differ as to the extent to which they can connect retrieved information to a larger picture, as they lack contextual pre-knowledge. Aspects of this pattern were identified in the seventh month in the implementation process too, which I called "the meaning of collaboration and self-organization". We learn instead about a teacher who is still faced with a student conformist culture, reflecting a boundary she tries to overcome. She worked with creating conditions for increased engagement. She still sought to motivate her students to reflect and be creative, but this was contradicted by their unwillingness to do so. In some cases, she found that students would share and work together. The last period was characterized by examining the meaning of organizing and managing of collaboration and self-organization. Here, the teacher established that both classes differed in how independent they are and that students work together best in pairs.

Therefore, the outline of the implementation process enables us to establishing the following research findings from the teacher case story.

First, the enacting and implementation of a social media learning design cannot be seen as a straightforward and linear process, but goes through different phases – which stretches from challenging to instituted periods – where the teacher needs to respond, enact and improvise strategies to the situations at hand. This is shown as a constant pattern throughout the implementation of the learning design. This means that we can identify that the first phase of an implementation process is important to master, determining its potential success.

Second, we learn that in order to work digitally and to perceive it as successfully, it is necessary to establish first a positive classroom atmosphere and trust between a student and an educator. Moreover, this must be cemented as a foundation in the "off-line world", involving the need to seed a social acceptance for working digitally, which has to be maintained continuously.

Third, the case study finds that both the teacher and students have different approaches to use and work with social media for learning purposes. There are different technological framings. Students approach and are socialized into a textbook learning tradition, while the teacher attempts to decouple from it, giving contradictory results. In some cases, students will prefer to work under a textbook regime. They will sometimes use the textbook as a defensive strategy to avoid working digitally. In fact, we find patterns of considerable technology skepticism toward particular social media services, which was demonstrated in the rejection of the blog project by the vocational students. Technology skepticism is also reflected in degrees of student disengagement, which the teacher has to work continuously to overcome by performing constant acts of motivation. This seems also to be suggested as a pattern in the students' conformist youth culture, which can sometimes appear impermeable, making it challenging to create conditions for sharing and engagement.

Fourth, the social media learning design has benefits and limitations. The learning design is bounded by the language skills and language progression of the students, in addition to being tied to the content and structure of the textbook. Various learning activities show that students are good at retrieving information but struggle with connecting pieces of information to a larger picture. This suggests that students appear to be bonded to a learning regime based on transferring knowledge by reproduction of information from a textbook, rather than choosing or seeing the benefits of exploring knowledge through searching and retrieving knowledge from

the Internet by critical reflection. On the other hand, we find that YouTube videos have a substantial potential to trigger learning processes and motivate students, which can be used in learning a foreign language and reflecting upon concepts introduced by a teacher. Another challenge is that the case study finds little evidence that students are willing to deep-dive into a theme and explore new knowledge beyond their personal goals and benefits, but prefer knowledge that is “useful” and “practical”. We see that there are great differences in how self-organized the students are to carry out their own studies and to what extent they manage collaboration.

Fifth, we learn that implementing a social media learning design is challenging and it takes time before learning demonstrably takes place. It has to be repeated and performed as a routine. The data analysis demonstrates that beneficial learning conditions can be created after three to four months with systematic teaching, before students have created constructive learning habits. Here, the case story showed two different learning curves. The students in the Spanish class appeared to have a much more smooth and progressive learning curve than the students in the English class. The findings suggest that the most productive and positive period of learning starts in January and ends in March.

Sixth, the case story shows that the learning design has different impacts on the classes. The findings show different social acceptance of a social media learning design. The students in academic studies are more receptive and open than the students in vocational training. This means that working with social media to learn Spanish was a success in the academic class, but only a partial success in the English class. For example, all the students in the Spanish class participated in the teacher’s long-term blog project, while this had to be abandoned in the English class. Here we find a contradictory research finding. While male students in the English class rejected the blog project, their counterparts in the Spanish class lead and are the most productive ones. The blog project shows little evidence of a willingness among the Spanish students to comment on each other’s work, but they prefer working behind the screen and giving emotional support by face-to-face. This means that the case story shows that the type of “community of practice” has not been established in either of the classes.

8.2.3 Research findings from the beta group case story

Considering the social media user patterns from the beta case story analyzed in Chapter 6, there are a number of research results. These are summarized and displayed in Table 8.4.

The most important finding is how the case story contextualizes a tendency in public administrations – showing how actors work with social media in a highly professional and organized way. Moreover, the case story describes the strategies public employees use to construct specialized knowledge around social media which is adopted for use in organizational life. This results in a knowledge production process leading to the construction of an organizational social media literacy, which combines facets from contemporary Internet culture with aspects from the governing logics of a public administration.

The organizational social media literacy emerges and is designed because of an assumption that social media create *new communication models* and enable new ways of working together, a work practice that in theory is characterized by the change from the *one-to-one* to the *many-to-many* way of communicating. As this is observed as a tendency *in society at large* and organizations are increasingly interacting in this terrain, this gives incentives for *employees in organizations* normatively to adopt and learn to work and communicate in the same way. There are benefits that can be applied in organizational life. This can for example contribute to

changing the work practice of communicating on e-mail and storing work on local file structures to approach an online community of practice as a way to organize and coordinate work processes. Moreover, the organizational social media literacy can contribute to create a community feeling in a public administration and bring down internal departmental boundaries. Furthermore, it can be used to enhance coworkers' knowledge of internal and external communication and deal with organizational culture in public organizations.

Table 8.4 Empirical findings from the beta case story.

Empirical findings from the beta group case story	
General findings	
Possible to work professionally with social media in a public organization	
Importing and approbation of ideas, symbols and cultural traits from other organizations	
Construct specialized and adopted organizational knowledge on social media	
Formal knowledge on social media from suppliers is a scarce commodity	
Hybrid understanding between contemporary Internet culture and institutional practices	
Understanding of social media changes as the beta group members enter new situations	
Created own definition and guidelines for social media	
Continues learning process by reflecting upon action and experience	
Communicate and recognized with peers in other organizations	
Understanding turns from "tools focus" to the importance of "communication"	
Widespread testing and reflection on social media apps	
Particular findings	
Organizational social media uses	
Frequently readopted with new meanings	A new front desk or telephone
Setting up eco-systems	Interacting within SNS and collaborative software
Structuration as knowledge process	
1. Discovery	2. Testing
Social media seen as ambiguous	Testing of the Open Source SNS Elgg
Imported, tested, and appropriated	Contacting with peers in the organization
Starts with Web 2.0 and Open Source	SNS positive and a disturbance to others
Loose network of colleagues	
3. Formalization	4. Strategizing
Constituted formally as group	Creating strategies for social media use
Guidelines authored, imported, and modified	Learning organizational netiquette
Recognition external than internally	Standardization of organizational social media
Deal with institutional logics and practices	Communicative aspects of social media
5. Educating	
Teaching strategies face-to-face	
Overcome the IT silo barrier	

The case story is an illustration of the conditions and challenges and what happens when a proficient social media user decides to approach a cloud technology that has yet to be recognized by a public organization's governing logics and institutional practices. Furthermore, the case story shows the challenges early adopters face when a technology is not a standardized commodity that can be directly "purchased" from IT organizations and implemented into an organization. The case story finds that the Beta Group members *discovered* that there is no *formalized knowledge* and no *methodologies* for mastering the ways to communicate and work with social media fitted to organizational life. This was clarified as the BG found that their IT

suppliers could not offer “templates” or “standardized recipes” explaining how to adopt and implement the new communicative practices assumed to emerge from social media. Instead, the BG had to depart on a long self-organized learning journey to learn “the ropes” or the “tricks of the trade” of social media themselves, resulting in the self-constructed definition of social media and a set of social media guidelines, which are reflected in an organizational genre repertoire. This learning project started with taking the initiative to form a structuration process, serving as the base for the BG’s knowledge production process. This consisted of five phases whereby I analyzed important themes the BG worked with during the period from 2008 to 2012, showing how social media had to be managed and organized through human interpretation and sensemaking. Characteristic of this knowledge production process, however, is how it has been driven forward by inductive thinking, creativity, and testing, where the BG members have used their personal reflection on action to construct an understanding of social media. This started with the first stage, the “discovery phase”, which showed how the BG approached social media as *ambiguous* and attributed their initial inspiration to Web 2.0 and the Open Source Movement. This phase illustrated how the BG started in the Echo Organization’s IT Department and was a loose network of coworkers who tacitly read and tested out social media. The second stage, named “the testing phase”, showed how the BG members put their initial inspiration into practice and tested the Open Source SNS Elgg on a group of colleagues and strategically made contact with peers or other early adopters working in the Echo Organization. The third phase was called “the formalization stage”. Here, we learned about how the BG came to be formally constituted as a competence group and authored the social media guidelines, but were also confronted with the institutional logics and practices and demands of a public organization. This phase illustrates how the BG became increasingly recognized by peers in other organizations working with media and communication matters. The fourth and fifth stages analyzed how the BG developed organizational strategies on how to use social media and educated their colleagues through self-designed training courses. These strategies include teaching municipal employees the complex art of netiquette, which can enable participation and mastering of external and internal communication fitted to organizational life.

Therefore, the knowledge production process leading to the BG’s self-invented definition and guidelines for use of social media in organizations bring the following empirical insights.

First, an important finding is how the managing and organization of social media in an organization through a bottom-up initiative is foremost an *innovative* piece of pioneering work, a phenomenon one would not expect in a public organization. This means that arguably the city municipality representing the Echo Organization is in the *forefront* on making up practical experiences on use of social media ahead of the technology suppliers of such services. In other words, the practice field is ahead of the technology suppliers on assessing the shortcomings and success of use of social media in organizational life. In the absence of aggregated and certified experiences, the early adopter work of the BG means that they have paid an “innovation cost” for being pioneers in their own field. In a way, one can argue that the activities of the BG represent an experimental approach to social media that is not dissimilar to R&D practices, which is highly based on organizational learning and acquiring experiences from their own use and explorative testing. In addition, this demonstrates that it takes time to produce solid and qualified user experiences on how to manage social media services in professional work life.

Second, the case story extensively documents the various ways the BG imports and appropriates a myriad of ideas, symbols, and cultural features from other organizations and aspects of contemporary Internet culture, which are acquired by testing and reviewing a range of social media software. This practice consists of re-translating and re-managing the ambiguity of social media by providing their own cultural stickers that make sense of use in an organizational

context. This practice of “importing” and “exporting” of influences between organizations is a form of exchange of experiences, forming a learning process contributing to mold and provide substance to the organizational social media literacy, which is a coherent pattern from 2008 to 2012. This inductive learning process provides a genre repertoire to formulate a comprehensible set of communicative strategies, where the main message from the BG is that participation in an online conversation on an internal or external SNS can bring benefits and access to valuable resources, participation recommended to be practiced within the boundaries of accepted professionalism, informality and by using a personal side of yourself.

Third, the case story finds that the BG’s understanding of social media *changed* according to the *situations* and *events* they have faced and interacted in. This is demonstrated in at least two ways. On the one hand, the analysis illustrates that the BG’s views on social media changed from an initial “tool focus” to later stressing the importance of working with internal and external *communication strategies*, which has to be related to work processes and organizational culture. Success in using social media has seldom emerged from focusing on the *material* properties of a technology alone, but has to be related to *immaterial* or *social sides* in organizational life. On the other hand, the analysis showed that the definition of social media formed as a hybrid understanding between contemporary Internet culture and institutional practices and logics by a public organization. This is reflected in the fact that when the BG began they identified with an *idealistic* stream – in the ethos of the Open Source Movement and Web 2.0 – but later modified this to accommodate the *formality* and governing logics imposed by a public administration by focusing on strategies, goal-thinking, and guidelines.

Fourth, the case study shows how the BG achieved recognition among *peers* in other organizations, while they struggled to obtain recognition internally within the organization where they work. This means that the BG had success among early adopters affiliated to organizations beyond the *external* boundaries of the Echo Organization and limited success internally. This means also that creating acceptance for working with social media has been a constant uphill struggle, where the BG members had to perform considerable “gardening” – a metaphor for implying that they constantly had to repeat and address the importance of social media. This shows that the BG members had rapid success within the ranks of their own domain, but had to garden a great deal before other employees with dissimilar backgrounds would realize the benefits that social media could bring. In this sense, we see a tendency on how an organization is partially receptive to adopting social media and does so by accepting it into its governing apparatus, but rarely works with it to become a full-scale standardized work practice, as this is more or less a tacit individual responsibility of the employee.

Fifth, and as an extension of the last point, the case story finds that the practical use of social media has shortcomings, in so far as we look at the individual experiences of the BG members. The case story finds that organizational use of social media is limited to a type of *public bulletin board* which is used for informing about municipal activities or for maintaining public relations, although the goal is professional collaboration with the citizens. Instead, the main communicative practice forming between the city municipality and the citizen is reduced to individual inquiries about municipal activities and information, like asking about admission to schools and kindergartens. This means that active participative online dialogue based on sharing is rare and official social media services used by the Echo Organization are under a degree of editorial control, such that organizational use of social media is performed and seen as a front desk or office clerk function. In a sense, we can argue that social media represents another “phone line” into an organization that has to be managed by someone. There are shortcomings to having an organization represented on social media. Social media is most suitable for human interaction, seldom organizations, as persons choosing to interact with public organization in

this way will most likely be met with its façade representing the formal tone and governing logics and identity of an institution. This means that social media indeed challenges the ways that employees communicate in organizations.

8.2.4 Research findings from the 2.0 social intranet portal case story

Moving on to consider the social media user patterns from the 2.0 social intranet portal case story examined in Chapter 7, there are a number of research results. These are displayed and summarized in Table 8.5.

Table 8.5 Empirical findings from the social intranet portal case story.

Empirical findings from the social intranet portal case story	
Different interpretations / technological frames	
Top-management – strategic perspective and motivator and facilitator	
Simplify work surface of employees	Mean to work with the CA's organization culture
Reduce information and e-mail overload	Part of a public procurement plan
Lower internal organizational barriers	Linked to ongoing top-management
Legitimizing a sharing culture	Organized as part of an internal project
Implementer – practical technology project	
Technical project	Social intranet still used as bulletin board
Organized as an internal project	Viewed as “mandate” from top-management
Self-learning of social intranet platform	Learn from peers in other organizations
Difficulties in creating an online dialogue	Set up personal social media eco-system
Carrying out testing of social intranet on users	
End-users – information repository	
Sharing as informing practice	Sharing as work practice
Extended use of reminders and invitations	Sharing interpreted as a new responsibility to position
Republishing of information	No collaboration on documents
Sharing leads to a “information overload”	Social intranet used for information retrieval
From engaged to disengaged users	No interaction with new ties beyond departmental boundaries
Difficulties in creating online interactivity in rooms	Online dialogue continues on e-mail and chat
Strong self-censorship	Creation of “private” social media eco-systems
Share only “finished” work	Twitter, Yammer, LinkedIn used as “listening posts”
High ambivalence of sharing “unfinished work”	Use Dropbox and Google Docs to co-work with peers
Sharing associated with risk and misunderstanding	Technical aspects
Information needs to be “approved” by managers	Search engines give outdated hits
Social grooming discourages sharing	Difficulties in interpreting user-interface
High threshold for sharing	Social intranet requires much self-testing
Cannot share confidential information	

The most important research finding from this case story is the contradiction between an organizational and top-management initiative intended to *simplify the work surface among employees* in a public organization, which appears rather to be interpreted as *complicating work practice* and creating *disengaged end-users*. This is shown by how a group of employees

differently interprets and ascribes various meanings to social intranet sharing and a sharing culture, which is implemented in a public organization. This means that the case story reflects a common pattern seen in the implementation of ICTs in organizations – that end-users can use and perceive a technology differently than the way it was intended to be used and perceived. This emerges as a systematic finding when seen in light of the role performance and user experiences of the employees. This suggests that importing and appropriating the idea of sharing from the social media universe and motivating employees to adapt from a one-to-one to a many-to-many way of communicating is indeed challenging. Instead, the case story finds that users are prone to evaluate the new social intranet in light of common social media user experiences. The case story establishes that organizational attempts to use technical properties enabling knowledge sharing to improve internal communication, reduce e-mail overload, and bridge gaps across internal boundaries by stressing *sharing* and legitimizing a *sharing culture*, is a demanding exercise. Moreover, this means that managing and organizing the meaning of sharing and turning sharing culture into a meaningful work practice in an organization are equally challenging to master.

Addressing particular findings from the individual user stories, the case story shows that the implementation of the social intranet is interpreted differently. The technological framing differs according to an employee's organizational affiliation and involvement in the implementation process. The initiator story, called "the holistic viewer", showed how the top manager interpreted *Jubel* from an organizational *strategic* position and regarded it as an instrument to fulfill larger organizational goals, as an objective to make the flows of internal information and knowledge transparent and accessible, but this was contradicted by internal organizational boundaries and technical ICT challenges. The social intranet is interpreted as an instrument to streamline the exchange of knowledge, which could be achieved by simplifying work processes, reducing information overload, and enhancing internal communication. The role of sharing and sharing culture is interpreted as a means to build bridges across internal organizational barriers. The analysis illustrated that the top manager's role performance is molded by taking on the role of being a *motivator* and *facilitator* of legitimizing a sharing culture, which is linked to an aim of building an organizational culture making the Lima Organization more integrated as an organization. Promoting a sharing culture has been a means to capitalize *internal* conditions to increase organizational performance to meet *external* demands and expectations, which are set by other factors operating beyond the boundaries of the Lima Organization. The analysis showed that the initiation of the implementation was administered by using project methodology and was organized as an internal organizational process involving actors from various departments and was part of a public procurement process.

The implementer story, called "between intentions and practices", demonstrated that the technological framing or the interpretation of the social intranet took a different turn. Although there are overlaps to the interpretations of the top-manager story, implying congruence on overall intentions to change work processes and adopt a sharing culture, the difference lies in how technological framing moves to interpreting the social intranet as a *practical technology project*, a facet appearing to dominate the implementation process. This connects to the fact that much of the implementer's work has included focus on testing, user training, and solving of user interface matters. The user story disclosed how the implementation process was organized as an internal project and used project methodology. The task team continuously worked in several fields, both toward parts of the management structure and also toward first-line positions in the CA. We learned that the social intranet was a type of "internal purchase" from the top management, which the implementer was expected to realize and return by a

concrete deliverable. Moreover, we learned that the implementation process was an opportunity to learn from peers in other organizations. But when the implementer turned his attention to the end-users' experiences, the findings indicated a user who saw the concrete challenges and contradictions with sharing and creating acceptance for a sharing culture. The implementer had to take the lead and role of being an "initiator" to set standards for sharing, something that he hoped would motivate colleagues to follow his example, but he saw the successes and pitfalls in so doing. The implementer saw how sharing led to increased interactivity on *Jubel*, as employees published more digital content than before. But this sharing is mostly "finished work", involving the performance of a sustainable and intensified informing practice. This means that publishing habits were practiced as under the old intranet – like publishing news stories – continued on the new social intranet, turning it into a bulletin board. The implementer story identified that sharing seldom led to digital interaction and collaboration among employees, resulting in little online dialogue. We ascertained that the implementer had adopted various social media software into his work practice too.

The six end-user stories taken together suggest technological framing of the social intranet from a larger domain of interpretation and put greater emphasis on technology use from a first-line position in an organization. Moreover, we acquire insights into the potential opportunities and contradictions on accepting *Jubel*, sharing, and a sharing culture. This means incongruence of expectations and experiences, when compared with the two first user stories. The end-users appear to be interpreting *Jubel* above all as an *information repository*, where sharing is relatively performed as an *informing* and *retrieving* practice. There is little evidence that sharing is performed as a means to connect with colleagues from other departments to exchange ideas and competences, for example. Instead, we see interpretations underlining how both a professional SNS model and sharing practices are somewhat organizationally incompatible with distinct institutional logics and beliefs. This is displayed when end-users argue that creating increased internal transparency and sharing of knowledge and information is challenging from their position, because it will potentially contradict considerations they need to respect in their line of work. Some information and knowledge cannot be shared in an internal online community, because of its nature and confidentially, meaning that for the end-users sharing of particular knowledge and information represents a great threshold. This means that we see a work and communication practice where employees still communicate on e-mail and have a disengaged and monitoring relationship with *Jubel*.

This finding does not mean that the end-users disagree with the intention behind *Jubel* or sharing. Instead, the end-users try to respect *Jubel* and have attempted to adapt to it in the best way they can. The end-users have completed the compulsory tasks, like filling out their user profiles, and tagged them with personal competences, making themselves present online. Some end-users have developed individualized user strategies, where they share through widespread informing, creating unforeseen effects. Conversely, the abolition of the intranet with *few* editors and introduction of a social intranet with *many* editors appears to have amplified the *volume* of information, implying that there is no longer a static bulletin board, but higher degree of circulation of information where end-users "push" and contribute with information they evaluate as relevant. This is particularly evident around the rooms. The end-users have uploaded relevant information to them and invited users. The end-users have tried to create increased interactivity by posting information in and around the rooms, but have experienced little or no online engagement. The main challenge is that sharing as informing practice seems to lead to a one-way "push practice" where the end-users have little bearing on whether their informing practice benefits the uses of others. In a sense, if making a phone call represents metaphorically

to share, one would expect someone to answer it – that it is *reciprocated*. Here, the end-users are making many phone calls, but perceive that no one answers.

This has obvious implications for end-user engagement. This disengaged aspect is reflected in the role performance in several end-user stories. Several end-user stories are illustrations of user adoption exemplifying how employees attempt to contribute to sharing and accept a sharing culture by developing particular informing strategies. Three end-users follow the intentions of carrying out the role of being a “sharer” of the assigned rooms they were given to administer. They uploaded documents, invited colleagues, and tried to motivate colleagues to engage. But after performing these activities over time without seeing their perceived benefits or values they start to question the practices they perform. This is reinforced when colleagues request documents that have been uploaded to the rooms to be sent to them by e-mail or phone, which means that the purpose behind sharing collapses. We see a rather systematic pattern where end-users started as “deep” or engaged users, but later turned into “shallow” or disengaged users. This makes sharing on the rooms low priority and they continue with other assignments evaluated as important to their work.

The end-user stories bring up other contradictions. An intention with implementing the social intranet was to simplify work surfaces and *reduce* information overload. The latter intention is contradicted in some of the user stories. Performing sharing as an informing practice has led rather to a perceived *information overload challenge*. The end-users realize that sharing leads to exposure to a high volume of information, which is seen as difficult to administer personally. This becomes amplified when employees already have a work situation consisting of interacting and organizing massive amounts of information. In a sense, sharing causes an information overload challenge on top of an already existing information overload challenge. This perception seems linked to how end-users perform a widespread practice of *republishing* the same information, which is available and stored in other ICT systems, an informing practice that is done to fulfill the goal of sharing. When exposed to a large information stream, this causes a sense of losing overview and the challenge of identifying what type of information is relevant to perform their work. Instead, an assumed information overload challenge leads to end-users setting up personal filters and disengaging and continuing to work on e-mail where information is structured and directed at a single receiver. On the other hand, we see users who adopt and actively use the rooms, who somewhat manage the information overload challenge and integrate the rooms into their work surface.

The end-user stories indicate that sharing and the idea of a sharing culture create great *ambivalence* and are associated with *risks*, resulting in strong self-censorship. The end-users have strong criteria for sharing and give various reasons whether they can engage or not in an online social stream, moreover, they have high expectations about online engagement. For example, online engagement needs to have an affordance of high *quality*, being professionally orientated. The end-user stories disclosed that few employees had ever commented on *Jubel*. The end-users seem to have decided to disengage and take on the role of passive spectators, merely having an online presence. This means that ordinary informal SNS behavior, which can create online dialogue and community feeling, is disapproved of, in some cases seen as socially uncomfortable. Instead, normal online socializing on SNS, often displayed in terms of “grooming and gossiping”, is regarded as unprofessional and irrelevant and does not correspond to the role performance of a public employee. And when the end-users observe that colleagues “import” informal SNS communicative practices onto a professional SNS – which is compared to “Facebook liking and commenting” – this serves as another justification to evade online engagement. This means that end-users do not communicate and share with each other. This still happens in closed digital spaces on e-mail, phone, and chat software.

The end-user stories show little proof of shared content creation. For example, there is little evidence that employees open a document and start working on it, like co-writing around a wiki page. Instead, the end-users share only general or approved information intended to inform, indicating a high degree of self-censorship. And often the information they share is already “finished work”. Some end-users argue that they can share “work in progress”, while others see this as inappropriate. Only a few end-users are willing to publish “work in progress”, while the majority argue that publishing unfinished work can cause misunderstandings and disturbance in the Lima Organization. They argue that sharing is associated with risk and information needs to be exempted and protected. Some information cannot be shared, as it is confidential and concerns sensitive material on individuals. Here, the end-user stories show that employee will go as far as using the quality safety system in the Lima Organization as a safeguard. They will in fact consult superiors and ask them to review the information before they eventually share, creating a norm that information has to be “approved” by a high-ranking authority.

The analysis of the end-user stories shows a surprising finding. This concerns the end-users’ tendency to view sharing as a new work practice, moreover, it is interpreted as a new responsibility. For example, several of the end-user stories explain how the administering of the rooms tends to be translated and allocated as a new responsibility to a single person in a department. This means that competencies and online activity in a room depend on the individual engagement of that person. This means perhaps also that adoption of sharing is somehow concentrated and individualized, while in principle it is a condition that should apply to all employees in the CA. The findings demonstrate several technical aspects. The social intranet is still used as a tool for information retrieval, but the data implies that searching for information has deteriorated. Informants explain that they get outdated hits and in some cases they miss the old intranet. Informants explain that the user interface is difficult to use and requires much self-testing to learn how it “works”. The data analysis suggests that none of the informants have used the social intranet to bond with new colleagues, meaning that much of the communication still happens on e-mail and phone with known ties. There is a tendency for employees to create rooms with members of their own department and colleagues they know from other departments, suggesting a fortification of the “IT silo mentality”.

The analysis showed that the end-users set up strong boundaries between private and work-related use of social media. Here, employees exercise a high degree of self-censorship and their only presence their online identity. The data suggests that none of the end-users are active content-producers. The end-users limit their online engagement to simple commenting and liking on their Facebook profiles and Facebook pages. In most cases, employees have only a Facebook account, while some extend private use into Twitter, LinkedIn, and Instagram. On the other hand, the data suggests appropriation of social media into work practice, involving the creation of so-called “private social media eco-systems”. Some end-users create Facebook groups to exchange work experiences and use LinkedIn to stay in contact with colleagues in other public organizations. Other end-users used Twitter as a type of “listening post” to monitor public debates. Some end-users created Dropbox accounts and collaborated on documents in Google Docs. These are viewed as more practical and useful to perform their work.

8.2.5 Overall patterns in research findings

We can thus synthesize and piece together patterns that emerge *across* the case stories. To outline this, I answer them in light of the research questions 1, 3 and 4 (see section 8.1 above). This can give wider insights into how social media is adopted and implemented into the three organizations by initiatives carried out by the actors I have analyzed.

Research question 1: How do the actors evaluate, classify and, define social media in organizational contexts in which they interact?

I believe that the study brings insight within three areas:

(1) *The adoption and creation of local social media ecosystems*: All four case stories demonstrate user initiatives on organizing and coordinating individual or group-based “social media ecosystems” on the turf of an organization. This shows tendencies of adoption and implementation of social media occurring “under the radar”, which means that actors override and use technologies differently than the ways intended. Regardless of age, gender, and organizational affiliation, the study finds that many informants use and combine different social media platforms to set up distributed, adaptive, open socio-technical systems, which are self-organized, scalable, and varied in sustainability. These are used for private or work-related purposes. The most common pattern is to use Facebook as a type of “digital highway”, which is combined with other social media tools to perform an activity or organize a practice. The use of social media differs greatly in professionalism and organizations. The most advanced is demonstrated in the teacher’s learning design, while in the student case story we learned that students used SNSs, chat software, and collaborative software to organize formal school activities. In the social intranet case story, employees combined Dropbox with Google Docs to organize work processes, while in the beta case story it was reported that a local technology enthusiast had managed to bring together citizens interested in history to write Wikipedia articles on local history based on the sharing of old pictures on Flickr.

(2) *Self-censorship, participatory divides and reading approach*: An important finding running as a theme throughout the case studies is the widespread pattern of self-censorship, participatory divides, and having a type of reading approach towards social media. This appears to result in degrees of technology skepticism and we find that many informants are reluctant to engage in online sharing and engagement, resulting in participatory divides, which appears to be a systematic pattern across generations. The clearest evidence of this finding was the collective refusal among the male vocational students to participate in a blog project intended to learn English in foreign language training. There are small examples illustrating reluctance to share and engage on social media, like a student in the student case story who created a cram sheet and refused to share it with his peers. This pattern is valid among the county municipal employees who enforce strict criteria for sharing and engagement. Even professional, proficient social media users like the digitally literate teacher and the members of the Beta Group abide by the same principle. There is strict publishing and editor control in how they choose to interact, reflecting negotiations of boundaries for participation. Online privacy is therefore an important value for many of the informants. This means that many informants have a passive online presence and in most cases monitor what others do on the social media platforms they interact on, meaning that many informants suggest they have a reading or textbook approach to social media more than being active sharers and community contributors of user-generated content. Besides the members of the Beta Group – who participate in online communities and somehow fulfill this expectation – many informants settle with “light” liking and commenting on the SNSs they interact on. There are few content-producers of digital items. Eight of the 39 informants can be classified as content producers: four students, the digital teacher, and the members of the Beta Group, where they predominantly contribute to the social media universe as bloggers. In this sense, we can conclude that few informants are actively engaging in an online community of practice. If they do, they take advantage as consumers of digital content made by peers. On the other hand, this does not mean that the informants refrain from online engagement. Informants engage by having a dual approach, where on the one hand they monitor and read online activities, while on the other hand they communicate and maintain

contact with ties in closed digital spaces like using chat software. But in most cases, communication still continues on e-mail. Moreover, we find that lack of sharing is reinforced by the experience that actions are seldom reciprocated.

(3) *Cultural re-translation and labeling practice*: Another finding running as a theme in the study is the prevalent cultural re-translation and labeling practice of social media performed by users. These are enactments of interpretation and sensemaking carried out by informants and may act as powerful instruments to manage and organize social media's ambiguity into organizational life. In many cases, they can be argued to surface as an aid to a user in deciding whether engage in a particular social media platform. By this, I mean that the informants in this study used their own personal experiences and technology understandings to provide explanations and expectations and make assumptions on what a new social media service "is" and potentially how it "works". This can result in emergent powerful cultural adaptations that consist of re-ascribing social media with new self-invented tags and understandings, where the Beta Group in the case story is an actor illustrating who plays on this element in great detail. In the student case story, the analysis showed how Facebook groups were used as a "class bulletin board" or as "driver lists" to coordinate illegal taxi driving. YouTube videos are another example. Here, YouTube videos are ascribed their own meanings and we find inventory lists of genres making sense only to the users themselves. There are advanced and particular terms about *agents* in organizations who create activities and are seen as fundamental to realize social media initiatives, like localized versions of early adopters, so-called "*ildsjel*" – a technology enthusiast. This practice of retranslation of social media provides assessment on usability, determining the limitations or how successful a social media service potentially is. In the social intranet story, we learned that the grooming and gossiping of colleagues emerges as a type of communicative practice that works as a justification on why a disengaged user should remain disengaged. When employees read about the leisure activities of colleagues, exemplified in the "ski wax discussion", the quality of such information is not compatible with what users associate with a professional SNS. In the beta case story, we learned that official organizational SNS accounts are managed as "official bulletin boards" or seen as a new assignment that should be performed by a switchboard operator, representing a new telephone line into the heart of a public organization.

Research question 3: To what extent is social media congruent with organizational practice?

I believe that the study brings insight within two areas:

(1) *A contradictory tool for learning*: The study shows that social media can create conditions for learning which have contradictory outcomes. Here, an unexpected contradiction is the mismatch between learning results and experiences between the teacher and students. The analysis in Chapter 4 and 5 illustrated that the teacher and the students were digitally skilled. This creates the expectation that the teacher and the students would meet on equal terms and produce good learning. On the contrary, we see the opposite pattern. Even digitally skilled students must be motivated to approach formal learning. Students take the traditional textbook approach – and sometimes prefer it over social media. Other times they will use the institutional textbook tradition in learning as a type of "defense strategy" to avoid working under social media learning design, as it requires them to be self-organized, and it is transparent and a challenging way to work. The other contradiction is how the male vocational students who rejected using blogs for formal learning participated in another sphere of the social media universe, as they demonstrated great willingness to use YouTube for informal and formal learning. We also see that social media is used for learning purposes in the other case stories, which is foremost reflected in the widespread importing and appropriation of ideas across

organizational boundaries. This is shown among the teacher, the members of the Beta Group, and the Project Manager who was responsible for implementing the social intranet. They frequently looked to *others* for ideas and inspiration to perform and make sense of their work, which is attributed to the absence of the relevant resources in their own organization, meaning that the available resources in their informal network played a significant role in how they kept up to date. This manifests in a variety of ways. The most common trait is to examine the experiences of colleagues holding ground *in other organizations* and be inspired by them. This appears to be viewed as essential. In the teacher case story, we learned how the teacher relied on her professional network to improve her practice, a trait that also included the Beta Group. The latter needed their professional network to create their competencies and the organizational social media literacy, where they used, among other things, sociological theory on social network analysis and social capital to create their concept of small-talking and the importance of informal bonding.

(2) *The challenges of creating engagement, sharing and sustainability*: The study is an indicator of the great challenges actors face when they attempt to manage distinct aspects of social media into organizational life. This especially concerns how to create and motivate colleagues to increased user engagement and sharing and to maintain sustainability around social media practices. Moreover, the case stories show that these aspects are demanding to manage and organize – both for those who implement them and for those who try to adopt and integrate these conditions into a work practice, which I believe is an important aspect to emphasize. As it is commonly known that implementing ICTs into organizations can bring different outcomes than planned, I argue that to make online communities sustainable or to get employees to adopt new technologies into a recursive practice, it is necessary to use other approaches. This demands working with the social aspects of technology and to create incentives that encourage ongoing use. A way to solve this is to send staff on training courses to learn a new technology and expect that they will afterwards maintain their learning into their work process. In this study, the case stories demonstrate that the challenges in implementing and administering a new technology into a practice and organizational context are difficult. In the teacher case story, we learned that even prior to starting implementation there must be *strategizing* on planning and organizing. And when implementing or enacting her learning design, the teacher had to enact various strategies by working with the social sides of technology use in her classes, which foremost included winning the trust of her students and creating a positive classroom atmosphere. This was essential to get her students to engage and share. Moreover, the teacher case story showed that this takes *time* to institute. We find the same pattern in the beta group case story. Here, they have adopted an agricultural metaphor to illustrate the challenges in creating conditions for sharing and engagement in organizations – early adopters have to perform a lot of *gardening*, which has to be carried out continuously. Moreover, this is concretized in a large variety of cultural expressions they had to “e-mission”, both digitally and face-to-face. On the other hand, we see that converting the meaning of “sharing” and “sharing culture” into a tangible and manageable work practice is equally challenging, especially when seen from an end-user perspective. This is shown in the social intranet case story. Here, end-users attempt to embed sharing into their work in different ways. The case story finds that it can lead to an information-overload problem or prove incompatible with established work processes, where the latter is illustrated by the finding that end-users approve of informing about “finished and approved work”, but have great ambivalence in sharing “unfinished or “work in progress”.

Research question 4: In what ways do social media challenge organizations?

This is a bold question, but I believe that my study brings some interesting insights here, which can be limited to three patterns:

(1) *Organizations capitalize and are present on social media, but meet “immune systems” as a defense mechanism circumventing organizational development and change:* There appear to be similarities between how social media users and organizations interact and adapt to social media in the case stories, which causes interesting contradictions. One of these patterns consists of capitalizing social media and having a passive online presence, but is controverted by strong forces in organizational life preventing organizational development and change. To use a “thought experiment” to illustrate my argument, one can imagine a social media user can be prone to register on several SNSs and build large online networks consisting of hundreds of ties, but seldom engage beyond being present. This practice means that a social media user is a *collector* of resources, which he or she *capitalizes* and puts on public display. Moreover, if the social media user remains passive, he or she seems not to take advantage of his or her resources or set them to beneficial and practical use. But this can be circumvented by other administrative and organizational conditions beyond the user’s control or personal will. Organizations are somehow confronted with this challenge. The case stories show that organizations respond to social media by registering an online presence. Moreover, social media is partially accepted “on paper”, as it is integrated into the governing apparatuses and logics of organizations. This is illustrated in the beta group and social intranet portal stories. The beta case story shows that the Echo Organization accepts social media by *imprinting* its governing apparatus around the technology, like creating strategies, having guidelines, stressing the presence of its measurement system, and allocating human resources. Furthermore, the social intranet portal story illustrates that top managers in practice approach particular aspects of social media and attempt to work with them to deal with internal organizational challenges. On the other hand, the analysis illustrates that when the *practice* side is considered, internal forces in organizations are sensitive and differently receptive to social media and display their skepticism by setting up a “defense mechanism” from its “immune system”. This means that social media is partially accepted into organizational life but seldom reaches further to address complicated and sensitive matters of organizational development and change.

(2) *Organizational expendable space to work with social media:* The findings demonstrate that it is possible in practice to incorporate social media into an actor’s work practice, which is achievable as various organizational designs permit it. Certain organizational designs provide employees with a relative degree of autonomy to perform their assignments as they see fit, which means that one can argue that some degree of organizational legitimacy exists to use social media as a methodology. There is expendable space within organizations, which enables a form of ambiguous autonomy, a condition that enables two actors to experiment with social media in two different types of organizations. In the K-12 education system, for example, teachers are granted a degree of autonomy to choose the methods they want to use to organize their teachings. In addition, teachers are encouraged by educational authorities to adopt and take advantage of new technologies. Educational authorities argue after a decentralized organizing logic, which claims that local actors are the most fitted to decide what might be the best solution to organize education, although teachers abide by a general framework. The teacher and beta group case stories are illustrations of two actors who take advantage of this autonomy and embed social media into their work practice. The difference between them, however, is how the teacher has to deal with other conditions and challenges. The teacher is not bound to consider the governing logics and apparatus of an organization, like embedding guidelines for social media use in an educational setting. These are irrelevant as there are none. Instead, barriers to user adoption are elsewhere, foremost among the skepticism she met among her students. The commonality between the teacher and the Beta Group is that they pay a significant price for being innovators. They go ahead, take the risks, map out what “works” and “doesn’t work”, operating in a gray space or at the boundary of the organization where they are

bound to encounter competing institutional logics and practices acting as barriers to organizational change and development. Choosing to operate there, means that they work “uphill” and take on an “innovation cost”, something they do voluntarily.

(3) *Interacting with ties with similar backgrounds and interests*: The findings show that informants interact with ties who share similar backgrounds and interests as themselves. This suggests a rather strong empirical tendency that informants tend to connect with ties they know from the offline world and rarely expand their social networks from the online world in organizational life. This might appear axiomatic, but I stress this point anyway, as it manifests in various ways. In the beta group case story, we learned that when the members performed the testing of the SNS Elgg, they scouted for other early adopters in the Echo Organization. Another case in point is the social recognition the Beta Group members achieved from peers working in the same field in *other* organizations. In the social intranet story, we learned that in the implementing of the social intranet there was a tendency to ascribe and transfer the sharing competence and responsibility of the rooms to so-called “super-users”, employees particularly competent in technology use. This pattern is valid in the student case. Here, we can observe how connecting and sharing of interest is reflected in gendered approaches and centers around use of various social media types, as female students were prime users of blogs and male students of YouTube videos and gaming apps.

8.3 Part III: Implications for research horizon

To establish how my research results contribute to or reconfirm established knowledge within the relevant research horizon, this is accounted for in the following subsections.²¹ The first subsections discuss how the study’s research results differ from or are similar to research perspectives on new technologies or social media in organization studies. Thereafter, I turn my attention to address specific contributions from each of the case stories, before I conclude and account for research limitations and suggestions for future research.

8.3.1 Research contributions to organization studies

In recent years, the current theoretical discussion in organization studies has been characterized by tense discussions, especially concerning the role of technologies in organizations and organizing of work. As a reader of the journal literature, I observe that it has led to a rift between two “camps”, both of which have a social constructionist approach to technology. The two camps study the same subject matter, but disagree on use of approaches. This creates discussions where each camp critiques the other’s strengths and weaknesses. There are attempts to set agendas for future empirical research and discussions on the ways to go about theorizing. Central to it, I interpret, are discussions on how refined researchers are, when they study the social construction of a phenomenon by the use of technologies. This causes critics to raise a number of concerns: for example, that analysis overstates the power of the social and downplays the meaning of the technological; one questions if micro-analysis is a suitable way to generalize about an organization’s macro-conditions and organizational change; one disagrees on how well scholars manage to address the relation between conflict, technology and power; and one stresses to what extent researchers analyze whether new technologies can change the institutional order of an organization.

²¹ Refer to Chapter 3 for a full summary of current and relevant research horizon.

In my view, the camps are connected to two ontological orientations, each with its own respective proponents. One camp follows Orlikowski's (2007, 2010) new research agenda, *sociomateriality*, while the other follows Leonardi and Barley's (2008; 2010) *voluntaristic materialism*, which offers an alternative view to sociomateriality and ways to go about theorizing on the role technologies in organizations.

In my view, Orlikowski's sociomateriality is a culmination and refinement of decades of research, attempting to frame the use of technology in organizations from a *practice perspective*, or as others have termed it, the *enactment perspective* (Leonardi & Barley, 2010). Central to this body of research, however, has been to emphasize the structuration of *emergent social structures* in analysis, which stream from patterns created by humans' recursive action and interaction with technologies (Boczkowski, 2004; Constantinides & Barrett, 2006; Dery et al., 2006; Orlikowski et al., 1995; Vaast & Walsham, 2005; Volkoff et al., 2007; Yates, Orlikowski, & Okamura, 1999). This research lens involves treating technology structures as virtual. These can change and take different forms, as humans integrate them into their everyday life by making sense of them by connecting them to situations in which they interact. The research focus is on what people do with the technology, the practice, which is ideally to be studied by use of a longitudinal research design and be examined as it unfolds with emphasis on communities. Orlikowski (2000) later refined her practice lens by drawing on influences from ANT (Callon, 1986; Latour, 1987; 2004; 2005), involving framing our understanding of technology under a new umbrella. Orlikowski and Scott argue that sociomateriality means to move away from considering actors and objects as self-contained entities that influence each other through impacts or interactions, to focus on "how materiality is intrinsic to everyday activities and relations" (2008:455). The aim is to challenge the ontological assumption made on the distinction between the technological and the social. Orlikowski argues that previous understandings have been framed around an *ontology of separateness* (Suchman, 2007), in which researchers theorized that the technological and social are *separate* entities and realities. This should now be reversed. We should see them as linked, equal, and inseparable, which means addressing a *relational ontology*. Instead of viewing the technological and social as separate, researchers should treat technological artifacts "symmetrically to the humans, and as equivalent participants in a network of humans and non-humans that (temporarily) align to achieve particular effects" (Orlikowski, 2010:135).

The proponents of voluntaristic materialism see the sociomateriality research agenda as problematic. They identify a number of shortcomings. Recently, they have directly and critically question if it is a "wrong turn" in current theorizing in organization studies (Mutch, 2013). This implies attempts to franchise a view where we only can use *one* theoretical perspective to understand the use of technology in organizations instead of being open to use multiple approaches (Scott & Orlikowski, 2013). The voluntaristic materialism approach differs from the sociomaterial perspective in a number of ways. First, they have another ontological interpretation of reality. They contend for recognizing that the material and the social are *external* relations rather than *internal relations* standing in a dependent relationship to each other. Instead, Leonardi (2013), for example, has suggested that sociomateriality could be approached from a *critical realist perspective*, which means to acknowledge the existence of *multiple* realities that can operate interchangeably and independently of each other. Future scholars should somehow still remain in the old terrain – which has meant to promote a view where scholars should use a *socio-technical-systems approach* (Emery, 1959; Trist & Bamforth, 1951) – and view actors and objects as self-contained entities that influence each other through impacts or interactions. Second, researchers should extend this notion and approach technology on the premise of an ontological separateness, as this can allow us to

address the material properties under a different light. Leonardi and Barley (2010) claim that this perspective is required, as the social constructionist approach to technology has marginalized the role of material in current theorizing. There is too much focus on the social construction of a phenomenon caused by the adoption of technology, leading to overstating the power of the social and downplaying the role of the material. In a sense, organization researchers are not studying the material properties of a technology, merely its social aspects, if we follow this line of reasoning. Third, Mutch (2013) claims that sociomateriality and practice approaches can prevent the discipline from conceptualizing the organizing of work and the organization itself. Fourth, Leonardi and Barley (2010) conclude that one of the greatest challenges with using a micro-perspective – on which many practice or sociomaterial studies are supposedly based – is that “this body of work might lead one to conclude that every implementation results in a unique sociomaterial order. Such a conclusion is problematic because, if taken seriously, social constructivists cannot speak to how the same or similar technologies occasion similar outcomes across organizations.” (2010:37). A practice or sociomaterial approach has limitations for understanding power in organizations, for example. Moreover, these approaches yield shortcomings, as they can offer poor insight to understand how “preexisting, entrenched social structures shape how technologies are deployed and used” (Leonardi & Barley, 2010:34).

The arrival of social media into organizations, on the other hand, has involved new challenges for organization studies, which has included calls from researchers to take greater interest in social media (Leonardi et al., 2013; Treem & Leonardi, 2012). Here, scholars also continue to theorize in new ways, as we see the tendency of connecting social media to the *affordance* framework (Majchrzak et al., 2013; Treem & Leonardi, 2012), theorizing I see as related to the voluntaristic materialistic research camp. In this connection, the affordance concept outlined by Gibson (1986) has been suggested as an alternative concept to sociomateriality. In a sense, to speak about the affordance of a technology – or the action capability of what an object enables – will somehow allow theorizing *beyond* an *ontology of separateness* (Suchman, 2007). Affordance can therefore permit researchers to address the material and the immaterial as independent of each other and reinstate the technological more thoroughly into the social constructionist approach to technology.

In light of the above, I constructed a different research lens to analyze the potential ways that social media is adopted and implemented into organizations. I created it for a number of reasons, based on my views and reading of current theorizing on how to address the role of technologies in organization studies. Here, I see that sociomateriality and voluntaristic materialism have strengths and weaknesses. I will give my views on them, interpretations that have become clearer through the progression of this study.

First, I constructed and used a model approach, because I believe that there are no “right” and “wrong” ontologies or research perspectives that can only be applied in organization research. Rather, researchers should use a diversity of approaches and concepts to understand the world at hand. Academic plurality, inclusion, and exploration are needed as ways to gain insights, rather than believing and using the monopoly of a single social scientific belief system. Moreover, we need to use our creativity and think differently. This means that my views on current theorizing are similar to those of Scott and Orlikowski (2013), who stressed this point in their response to Mutch’s (2013) recent and strong criticism of sociomateriality.

Second, I used and developed a model perspective, because I have been guided by an inductive research approach. My choice of theory was empirically governed. For example, this meant that I was not determined to test out a predetermined theoretical model, but I used theory as a way

to engage with other researchers about the interpretation I made about the life world of my informants. Therefore, the premise for my use of theory was formed by the subject matter at hand and how I evaluated it to manifest empirically in society at large – a trait I assume needs to be the base and norm in research (Schieffloe, 2011).

Third, I have not been motivated by using a sociomaterial or a voluntaristic materialistic framework. I see great challenges overshadowing their purposes, for a number of reasons. Both approaches are challenging to apply. They are demanding to operationalize into a practical research project: for example, I am uncertain when a sociomaterial condition exactly applies – where and when is an informant in a state of *relational ontology*, when using a social media service. In contrast, to describe and contextualize the social and the material independently of each other and show how they work in multiple realities, as suggested by the voluntaristic materialistic research camp, is another conundrum. Faced with such aspects, I largely view the current theorizing on the role of technology in organizations as overplaying the meaning of theory. Instead of providing meaningful concepts leading to new insights on how social media is used and potentially affects organizations, sociomateriality and voluntaristic materialism will – in my view – lead to intellectual complexities. Using them can institute a gap between theory and empiricism, causing the opposite effect, that theory and empiricism can live separate lives, leading to our conception about technology developing into an academic discourse only a few truly understand.

Fourth, eventually I evaluated both the sociomaterial and the voluntaristic materialistic framework as analytically inappropriate. I saw them to be unsynchronized with the ways that social media services make their ways into organizational life. For example, few research contributions in organization studies – to my knowledge – have properly cast light on or created a conceivable perspective to frame the material properties and conditions generated by social media services, apart from the network research trajectory outlined in Chapter 3.²² I saw it as challenging to use them to grasp several conditions; that social media is highly user-driven; that end-users today can easily start engaging with each other at very low cost, which allows humans to coordinate and organize activities in new potential ways; that there is a high degree of media richness in social media services that are used by millions of people worldwide; that acts of individual enactment or mass collaboration with the digital participatory culture of the Internet can produce emergent social structures; that social media phenomena could challenge the supremacy of established practices and institutional logics. In sum, since my interpretation was that organization researchers tend to frame adoption and implementation of technologies into organizations from top-down approaches and not problematize the aspects mentioned, it became logical to pursue the research path I selected.

Consequently, as I observed that these conditions took “place out there” – in society at large – the thesis explored if the same dynamics play a role in organizational life. As part of my research lens, I explored what happens when social media is brought *onto the turf of an organization* by initiatives carried out by local actors affiliated to organizations. We learned that social media services are adopted “under the radar”, challenging and rewriting the ways that ICTs are administrated in organizations. I approached social media with a focus on grassroots initiatives, a perspective that emphasized the realities of actors working in first-line positions in organizations. This required use of *decentralized perspectives*, in addition to the usual top-down approaches. On the other hand, as the research project progressed, I concluded that informants approached social media from an *interpretive* point of view, which produced

²² See subsection 3.1.2.

the repeating pattern that the technology had to be explained and made sense of when they used it. Social media was approached as *ambiguous*.

In this regard, I turned to the work of Weick (2001) who suggested that when new technologies enter organizations they tend to take on an *equivocal* nature. Technologies are “undefined” and require ongoing structuring and sensemaking if they are to be managed. Weick implied that humans had to rely on interpretation or retrospection and construct *scripts* around the technology they intend to use. Scripts, which can be seen as *meanings* or *cognitive models* or assumptions about a technology’s apparatus created by interpretation, manifest in symbols and expressions embedded into the technology and emerge from social processes. Although Weick outlined his arguments in a different era, I considered his observations to be valid about social media use. Social media took on an *equivocal* role, as it was common for humans to interact with it in situations characterized by media richness and complex technology environments. Social media is *no less* abstract than ICTs and has to be managed by acts of sensemaking where users rely on *interpretation*, *enactment*, and *retrospection* to figure out what it “is” and how it “works”. These factors meant that my views on social media aligned with current theoretical debates in organization theory – that we still have to engage with ontologies around technologies, but differ from the sociomaterial and voluntaristic materialistic frameworks. Instead, I argued that researchers could engage in analyzing the construction and outcomes of the interpretation and scripting processes emerging from the recurring enactment with social media and show how humans manage and organize themselves in relation to it, potentially revealing the temporary organizations I called models.

Therefore, I suggested using an empirical *model-based technology approach* (Barth, 1966). This perspective emphasized the strategies and choices humans use to manage and organize processes and outcomes of recurrent engagement with social media. The model approach was used to frame and give empirical depth to the potential *outcomes* or *effects* of emergent social structures, coming from actors’ social media use in organizational life. I developed this approach because current theorizing in organization studies had a missing link. For example, I believe that the sociomaterial and voluntaristic materialistic frameworks are exceptionally well crafted to conceptualize the ontologies of technology use on a highly general and abstract level, but do not adequately give insights to understand potential *local* effects and *nuances* and configurations or forms. Yes, organization theorists can extensively describe the complex ways actors use technologies, as part of social processes, but they appear not to speculate adequately on what recurrent use or attempts to institutionalize technology lead to, potentially what to call this form. This aspect is related to my belief that actors’ use of technologies create emergent social structures that have the generic capacities to create forms, which can be temporary or permanent. This means that I have a formalistic view on technology use in organizations, which explores the potential outcomes of generic traits in social processes coming from human actions. In sum, my *model-based technology approach* has been used to think *differently* and to address analytically the consequences of emergent social structures coming from the use of social media.

The research stream that has adequately pinpointed what I mean by the above was illustrated in the ways organization theorists have addressed new *organizational designs* (Groth, 1999; Mintzberg, 1983). Furthermore, I argued that we could view social media use from an *actor perspective* or from those who use the technology as part of everyday life in organizations. The model-based technology approach was used to understand how this plays out in various organizational contexts and is part of the adoption and implementation processes of social media initiated by the actors themselves. Moreover, I used defined and developed analytical concepts in organization studies, which have explored humans’ technology use. Here, I was

inspired by Orlikowski's early work. Indeed, it was imperative, as it is brilliant in its own ways, especially in Orlikowski's analytical way of reasoning. Orlikowski's scientific production is characterized by first *establishing strengths and weaknesses* in current theorizing and thereafter complementing it and *suggesting new concepts*, which are always explained and legitimized in an *empirical analysis*. This leads to theoretical concepts and thinking that describes humans' technology use in an understandable and in a very accurate way. They are much more in tune with how humans use social media than the sociomaterial or a voluntaristic materialistic frameworks presently offer.

I have been inspired by Orlikowski's early work and have tried to show how humans *interpret* social media by drawing on previous frames, schemas, and experiences when using a technology (Orlikowski & Gash, 1994). This involved focus on cognitive structures, which emerges when people use the technologies in organizational contexts. I was also motivated by using a *practice lens* to examine how humans use social media and understand the evolution of practices emerging from its use (Orlikowski, 2000; Orlikowski & Yates, 1994). In addition, I included theoretical concepts on learning ecology (Barron, 2006), digital learning theory (Siemens, 2005), how practitioners use reflection (Schön, 1983) and the meaning of boundaries (Barth, 1969). These latter concepts were applied to explore factors and aspects that I evaluated not to be adequately addressed within what Leonardi and Barley (2010) called the interpretation and enactment perspectives.

Having constructed the above "research filter", how can I establish the contributions of my research to organization studies and which new insights does it attain?

These are outlined below:

1. *Empirical documenting use of social media*: One contribution of this research is the extensive empirical documenting of social media use in organizational life carried out by actors. This contribution has several facets. First, the study provides empirical insights on how social media is actually used by humans, meaning contribution to a research stream exploring the effects of social media in organizations (Lüders, 2013; Pettersen, 2014; Steinfield et al., 2009; Zhang et al., 2010; Zhao & Rosson, 2009). Second, organization studies has a track-record of documenting that humans interpret and make sense of technologies by drawing on previous frames and experiences from other domains in life when using and approaching a new technology (Barley, 1986; 1988; Gopal & Prasad, 2000; Hsiao et al., 2008; Jian, 2007; Markus, 1994; Prasad, 1993; Walsham, 2002). Here, the study reconfirms that this is still a crucial variable, a consistent theme in all the case studies. Third, I suggest that the study opens a new path to understand the great variety of activities that are enabled by social media in organizational life. We see how employees coordinate and organize themselves in small-scale social media ecosystems, reflecting patterns of self-censorship, participatory divides and a reading approach towards social media. These patterns produce challenges in creating engagement, sharing, and sustainability in use of social media.
2. *Decentralized perspective and model-based technology approaches*: My interpretation on current theorizing in organization studies is that it is often based on the assumption and premise of top-down approaches, where users are differently involved in adoption and implementation processes. To my knowledge, there are few studies that approach social media by using *grassroots perspectives* or emphasize how actors in first-line positions can create their own organizations around social media on the turf of an

organization (Soyland & Herstad, 2011). Applying a model perspective is perhaps a procedure to express the ways that social media is socially constituted into organizations giving small-scale informal organizations. Here, an important insight is how this study demonstrates that certain organizational designs give actors a relative degree of autonomy or expandable space to set up social media practices. This suggests that the local models are research contributions to our understanding on how social media is adopted and implemented into organizations.

3. *Nuancing the insights on the unfolding of structuration processes from a practice perspective:* Practice approaches in organization studies emphasize the importance of emergent structures, which stem from structuration processes produced by social interaction and use of technologies (Orlikowski, 1996; Orlikowski et al., 1995; Yates et al., 1999). As pointed out earlier, these are ideally to be studied by use of a longitudinal research design and to be examined as it unfolds with emphasis on communities. The criticism of these approaches is that they do not adequately frame the role of preexisting and entrenched social structures in organizational life, such that they “cut off” the actions and motives other actors might have. In addition, as practice perspectives are prone examining organizational change from micro-perspectives and stress potential change in work routines, this can yield limited insights to say something about macro-conditions, like how large institutions attempt to control each other by selling and implementing technologies (Leonardi & Barley, 2010). Furthermore, my interpretation and reading of studies claiming to scrutinize emergent structures coming from structuration processes are often portrayed as contained, stable, and linear. In contrast, this study contains two longitudinal case studies. These show that the nuances and complexities from structuration processes are demanding to perform by those who organize and enact them. The case studies suggest that social media grassroots initiatives are seldom linear and controlled, but include a need to perform a wide range of negotiative strategies to counter and accommodate other preexisting and entrenched social structures played out by other actors. This is exemplified by how early adopters can meet technology resistance or skepticism from other actors, which is prone to manifesting in small-scale situations. The case studies are a reminder that human retrospection and improvising are crucial skills, which are needed to master dramatized and unpredictable challenges emerging from structuration processes. Here, these insights perhaps represent contributions to how organization researchers approach structuration processes.

The nuances in potential research contributions from each of the case stories are accounted for in the subsections below. Here, I will address how the particular analytical concepts I have used can give further insights on use of social media in organizations. This requires me to explain what the four models represent.

8.3.2 Research contributions of the student case story

The student case story is a research contribution to educational research on social media, giving insights into learners’ *social media literacies*.²³ The case story *reconfirms* known findings and user patterns documented by educational researchers, research work that has recorded that university students use SNSs for online social and leisure activities, centering around studies of Facebook use (Christofides et al., 2009; Ellison et al., 2007; Ophus & Abbitt, 2009; Pempek et al., 2009). This research stream has documented that students avoid using social media for

²³ These contributions are based upon the outline of research horizon presented in subsection 3.3.2.

formal learning purposes (Selwyn, 2009) and stresses that educators and students do not engage with each other. In this regard, my case study confirms that high schools students' user behavior is similar to university students' behavior. On the other hand, the case story suggests adding knowledge and opens a new research trajectory on how students use social media in the *lower levels* in national education systems. This is a new insight, as much knowledge has been shaped by university students' user experiences (Hew, 2011).

Consequently, I evaluate that the student case story contributes to knowledge as in the following points:

1. *High school students take the initiative to organize formal learning*: Researchers have documented that university students use Facebook to organize simple logistics about their studies, to some extent, high school students. Researchers report in unison that students prefer *not* to use social media for formal learning. Moreover, rarely is there evidence found that students take the initiative to organize formal learning activities. Studies are inclined to establish that educational use of social media is under teacher control. Therefore, to find that high school students take the initiative to organize formal learning activities on a social media service *sanctioned* by a learning institution is *new*. I suggest that my finding of widespread user divides, moreover, that students who interact across social media services and are content-producers are likely to show positive study habits, who prove to be mostly *females*, are new insights.
2. *Minor changes in SNS user patterns*: The case story adds to knowledge on some minor SNS user patterns: tendencies of strong self-censorship; decline in the popularity of Facebook; Facebook groups are used as "private taxi sites"; combined use of several SNSs; and strong tendencies for users to become disengaged.
3. *The use of YouTube to organize informal learning*: The case story contributes new knowledge on how youth use YouTube to organize informal learning.

An important question that remains is *what* the local model, *the shadow student learning ecology*, can "represent". Furthermore, what can such a concept teach us about organizing learning by use of social media?

By combining aspects from the work of Barron (2006) and Siemens (2005), I used a learning ecology perspective to construct a concept that can give an idea of an emergent social media arrangement, which emphasizes the dynamics, and strategies of how young people's *social media literacies* play out in a learning context. Moreover, the term indicates a simplified and holistic representation of a temporary organizing, which is made up of the sum of transactions performed by students in today's social media economy, transpiring in the light of an organizational context and contradicting an educational initiative. The term is therefore a way to describe the complex manners of social media behavior, instead of merely using technical definitions of Web 2.0 applications, as a way to understand how learning is organized. I stress that the shadow student learning ecology is by no means absolute. It can be one of many approaches to analyze how young people use social media for learning. This means that I used it as an analytical procedure to complement an already existing framework, which could give answers to social media behaviors I had challenges in explaining.

Consequently, the shadow student learning ecology is an illustration of how high school students take the initiative and use social media to construct an organizing. I showed this by analyzing how *social media is used to organize and coordinate formal and informal learning activities*. The analysis suggested that social media is an arena to coordinate and organize

formal learning activities already given by an educational authority. There is little evidence that students are motivated to use social media resources to pursue knowledge beyond the assignments they have to complete. This indicates that practices from the “offline world” make their way into the “online world” by the actions of the students. Students settle with communicating and sharing school related information, making their online engagement an *individual* rather than a *collaborative* performance.

In the organizing of informal learning, we saw another reality. Here, the students strived and chose to pursue and create learning opportunities. This is displayed by how the students performed a range of knowledge acquisition strategies, where they retrieved and reflected upon user-generated content – YouTube videos – to learn about activities that interested them. This way they were able to learn more about their hobbies. My data analysis showed that the students reflected upon experiences produced by their *online peers*, which were performed in individual or collaborative contexts. When learning to play a musical instrument or a new game, they supported themselves by using a pool of resources that had been produced by others, reflecting that when engaging in this field they chose to become part of a “YouTube community of practice”. Engaging in the YouTube community is beneficial. In this, we saw evidence of how students managed to connect pieces of information to enhance their understanding of a pre-established experience – they searched for information, worked with it or transformed it, and used this experience to enhance their skills and knowledge on something that interested them, which occurred in contexts typified by self-organization.

To conclude, while Barron (2006) demonstrated brilliantly by using a learning ecology perspective that students tended to *migrate* between school and private contexts to harvest knowledge and learn to become proficient technology users, my analysis finds something else. Barron showed that her informants tended to cross the *boundaries* between interdependent learning contexts, indicating that students combined formal and informal learning interchangeably to enhance knowledge. In contrast, my analysis demonstrated that the high school students *compartmentalize* their knowledge acquisition strategies into limited and defined contexts. This means that the case study shows that the students compartmentalize and are not motivated to *cross the boundaries* between formal and informal learning contexts. To them, “school is still school” and “social media is for grooming and gossiping”.

8.3.3 Research contributions of the teacher case story

The teacher case story is a contribution to educational research, providing insights into how educators organize practice by using social media.²⁴ The case story confirms known patterns and challenges previously documented by educational researchers. This research has recorded that educators face challenges in creating learning conditions for student engagement and collaboration, a pattern documented in studies on use on blogs and wikis. A consistent theme in these studies is the *differences* in how well educational use of blogs and wikis is received by students. Studies establish that students can be positive and see benefits (Deng & Yuen, 2012; Goktas & Demirel, 2012), but the extent to which students contribute and engage in learning activities varies (Deng & Yuen, 2011; Jimoyiannis & Angelaina, 2012; van Wyk, 2013; Yang, 2009). Researchers are prone to communicate that educational use of blog and wiki involve a great deal of teacher instruction and performance of scaffolding strategies to become successful (Cole, 2009; Ebner et al., 2008; Karasavvidis, 2010).

²⁴ These contributions are based upon the outline of research horizon presented in subsection 3.3.2.

Again, insights from this research are defined by how *university students* use social media for formal learning. We have limited knowledge on how use and learning of the same technologies are applied in the *lower levels* of education systems; hence, the case story adds knowledge to an unexplored field that requires more research. Here, the most significant contribution is how I meticulously document the complexities, challenges, and nuances of planning, organizing, and implementing a classroom social media learning design from a teacher perspective. In light of that, I emphasized that Norwegian teachers are prone to using digital material manufactured by professional publishing companies as the premise for their organizing practice and rarely use social media, which adds legitimacy to my claim (Hatlevik et al., 2013). Furthermore, my study is of greater value as it is a classroom study that tracked practice from a longitudinal perspective and documented the nuances taking place in a learning process.

Therefore, I evaluate that the teacher case story adds knowledge in the following ways, which are particular *nuances* of already established research knowledge:

1. *Curriculum-based social media learning design*: The case study accentuates that it is possible to organize classes by use of social media in foreign language training in a high school setting and embed goals from national curriculums.
2. *The importance of strategizing*: The case story adds knowledge to the scaffolding strategies teachers have to perform to make students engage and collaborate by use of social media. Here, an imperative finding is the importance and necessity of creating a positive classroom atmosphere and that strategies are adopted while enacted and are part of an ongoing process following the progression of a school year.
3. *Students are textbook orientated*: The case story documents that students are prone to exhibit a technological framing towards a textbook culture, even when using social media for learning purposes. This aspect has been largely overlooked in the current research literature.
4. *YouTube effect*: The case story is a reminder that YouTube videos have a positive outcome on learning. YouTube videos can trigger and motivate students to learn.
5. *Differences in students accepting a social media learning design*: The case study shows that it takes time to institute a social media learning design. The case story established that students accept and respond differently to educational use of social media. Students can meet such learning approaches with technology skepticism.

An important question that remains to address is *what* the local model, the *authentic learning situations*, “represent”. Furthermore, what can such a concept teach us about organizing a learning design in foreign language training by use of social media?

By combining aspects of Orlikowski’s (2000) technology-in-practice with Schön’s (1983) reflection-on-action, I attempted to establish what I called “*reflective-technology-in-practice*”. I combined these terms to construct a practice lens to analyze the teacher case story. Furthermore, my aim was to extend Orlikowski’s argument, which stressed the importance of investigating *emergent structures*, which can surface from human action by recurrent engagement with technologies. Orlikowski argued that people’s recurrent engagement with technologies produce a set of rules and resources that are reconstituted by action. This argument implied that the research focus needed to be directed on particular patterns and conditions that can become *routines*, as a consequence of recursive engagement with technologies. Such recurrent practices were argued to shape technology structures and could take different forms. We learned that these are temporary, situative and contextually dependent and can be enacted in many different ways. Orlikowski stressed that these are not “out there”, but are virtual, emergent from people’s use and part of recurrent production by everyday action, manifesting

in situations. Although Orlikowski introduced several technology-in-practices, I took interest in the “improvisation-technology-in-practice”. I interpreted it to be a development of the situative change perspective (Orlikowski, 1996). This argument was demonstrated in the implementation of Notes among a group of specialists working in a customer support department in a company. In short, Orlikowski found that the specialists appropriated Notes, but later developed unplanned work routines by acts of improvising around a database embedded in Notes, routines that later changed the organizing structures of a customer support department. Orlikowski established how an informal practice was enabled by the implementation of a technology and brought organizational change, causing the specialists to become collaboratively orientated. Such factors were allowed, as the work culture at the customer department was learning orientated, team based and cooperative.

On the other hand, the concept “reflective-technology-in-practice” was my attempt to address the enactment of a social structure, where an actor had to use personal reflection or retrospection to understand her recurrent use of a technology. “Reflective-technology-in-practice” was conceptualized to represent a more structured and controlled form of improvisation and experimentation with new ways to use social media in education. This is characterized by how the teacher reflected on her actions and “engage[d] in a process of continuous learning”, to use Schön’s (1983) words. This was emerged as a re-constituting pattern, as the teacher was motivated by performing a “trial-and-error-practice” with social media. This had two sides, which shared analytical parallels to a social structure and agency problem complex. First, the case story showed how the teacher regularly tested out educational social media and designs on her classes, which happened in *action*, while secondly, she *reflected* on her enacted experiences on what “worked”, as an attempt to adjust herself to a recursive pattern to achieve a long-term goal she set, which dealt with improving learning and motivating her students to learn English and Spanish. The case story demonstrated that this was ongoing, but happened against a different organizational setting than the one described by Orlikowski. While Notes was implemented as part of a top-down initiative, the teacher case story demonstrated the opposite. Relative organizational flexibility and autonomy permitted the teacher to “select”, “import” or “shop” social media services after her own choosing. These were reused and reinterpreted to fit educational designs the teacher defined as necessary, but were combined and aligned with personal experiences and institutional conditions. Behind authentic learning situations, the teacher could design her own “reflective-technology-in-practice“, but also implement it, enact it and experience it through her practice, which in essence meant that the teacher *staged* her actions and investigated how that enacted with emergent patterns through recurrent and ongoing interaction with an educational technology design she created.

What does the use of such a research lens teach us? My interpretation is that many analyses of structuration process – involving technology implementation in organization studies – focus on end-results or portray stable and rational processes that can lead to changes. This creates a “sterile” picture of change processes and technology implementation, which leads to ignoring the many nuances and potential conflicts and contradictions that are sure to arise. Organizational members are not always loyal to technology intentions. Moreover, organizational change and changing practice is a difficult matter, perhaps one of the greatest challenges managers and practitioners face in their line of work. Regardless of that, as a reader of such analysis in organization studies, they appear not to exist in the representation of organizational life. On the other hand, the teacher case story is an illustration that implementing and enacting of a technology learning design is not a “simple walk in the park”. It portrays the opposite. Enacting of a technology implementation process is a demanding and complex undertaking. It also takes time to institute and become accepted by other organizational

members, which can lead to different end-results. The teacher case story is a lesson that in structuration processes there is a continuous and negotiative social role play where the teacher encounters dozens of situations where she meets other actors in the classroom situations who do not share her belief in social media and learning. Students enter class with different motivations and ambitions. Moreover, they have different technological framings, which set their premises for technology use. Students can be skeptical and be orientated toward a textbook culture, which requires the ongoing performance of multiple strategies acting as counter-measure to achieve a goal to work in the digital age. A practice lens therefore leads us to understand the complexities of these social realities.

8.3.4 Research contributions of the beta group case story

The beta case story is a contribution to organizational research on social media.²⁵ Apart from the successes reported from IBM's Beehive project (DiMicco et al., 2009; DiMicco et al., 2008; Lin et al., 2012; Steinfield et al., 2009; Thom-Santelli et al., 2010; Thom-Santelli et al., 2011; Wu et al., 2010), studies have made contradictory findings. Studies have concentrated on mapping basic user patterns among users in organizations. Research has found that microblogging communities and professional SNSs can have the capacity to build bridges across organizational boundaries (Brzozowski, 2009; Brzozowski et al., 2009), inasmuch to document that they are sustained by a small group of employees who actively share and engage but is monitored by a large silent majority who watch what others do (Jackson et al., 2007). Research has established the reasons why employees blog and engage on SNSs, which in many cases deal with finding competences, exchanging ideas, and maintaining and building professional relationships (Ehrlich & Shami, 2010; Linders, 2012; Zhang et al., 2010; Zhao & Rosson, 2009). Researchers have proved that users have intricate communicative strategies, reflected in a participatory divide and conscious role performance (Gibbs et al., 2013; Lüders, 2013; Mukkamala & Razmerita, 2014; Pettersen, 2014). Studies have determined that it is challenging to sustain social media use and that colleagues can be strict on what type of information they share, which is specifically valid in research on organizational wikis (Danis & Singer, 2008; Giordano, 2007; Grudin & Poole, 2010; Holtzblatt et al., 2010).

The beta group case story is a contribution to the above research stream. The case story also confirms findings seen in previous studies on the same matter. On the question of addressing new knowledge, to my knowledge, there appear to be few ethnographic studies in the literature that have mapped how employees build specialized competence and work professionally with social media in public organizations. Few analyses seem to have considered this from a longitudinal perspective. Moreover, the current research horizon shows that few studies have explored how employees in public organizations construct organizational social media literacies, which combines facets from the contemporary Internet culture with the governing logics of a public administration. This means that the beta case story represents a contribution by showing a more complex way of working and using social media in organizations, although it also conveys familiar conditions and challenges from organizational life. On the other hand, the case study confirms certain known patterns, like that public organizations integrate and construct official frameworks into their uses and that social media tends to be used as a "push tool" to inform about activities (Reddick & Norris, 2013).

Therefore, I evaluate that the beta case story contributes to knowledge in the following ways, which are particular *nuances* of already established research knowledge:

²⁵ These contributions are based upon the outline of the research horizon presented in subsection 3.3.1.

1. *“Innovation cost”*: The case story gives insights on the challenges and conditions early adopters in public organizations face when they take the initiative to make up practical experiences on use of social media rather than the technology suppliers of such services. The case story contributes with knowledge on how the practice field can be ahead of the technology suppliers in exploring the shortcomings and successful use of social media in organizational life. In the absence of aggregated experiences, the early adopter work has involved them paying an “innovation cost” for being pioneers in their field.
2. *The importance of communicative strategies*: The case story provides in-depth understandings on the range and complexities of communicative practices, which transpires from use of social media in organizations. This includes making sense of them, constructing them from acts of translation, and disseminating them internally in organizations.

What then does the local model, the *relation platform*, “represent”? Furthermore, what can such a concept teach us about the ways social media is used in public administrations?

By combining aspects of Orlikowski and Yates’s (1994) genre repertoire with Schön’s (1983) reflection-on-action, the beta case story tried to show a structuration process on how a group of employees created their own definition of social media and social media guidelines fitted to use in a public organization. This involved analyzing the ways the BG enacted a structuration process and created a set of communicative practices, which was linked to work with organizational communication. This dealt largely with learning the complexities of a technology and the communicative practices it enables and later teach them to coworkers with the goal of motivating them to change work practice by abandoning e-mail communication to share knowledge and engage on social media platforms.

Using a perspective that established a structuration process demonstrated two things. First, when social media first surfaced, the BG members were confronted with the challenge of sensing the *absence of a shared meaning* of what social media “is” or “was”. Social media was difficult to define and was *equivocal*. When the BG members used the established resources they normally use to stay updated on changes in the technology landscape, they could not give them an adequate description of the new technology and how to integrate it as part of their work practices. Although working in an organization that possessed much knowledge and resources, the BG experienced a lack of formal competencies from where knowledge could be harvested. In a sense, there was a type of “organizational knowledge vacuum”. Second, confronted with this situation, the BG members attempted to conceptualize social media and took the initiative themselves to learn about it. They self-initiated a learning project, which involved drawing on past and present experiences and looking to sources beyond the boundaries of the Echo organization, to form their own professional knowledge on social media and give understanding to their work. This consisted of enacting and self-organizing of a “trial-and-error practice” where they tested, interacted and wrote about how to use social media in an organizational context. As part of enacting this reflection process, the BG broke down definitions of social media, informal knowledge, and cultural influences associated with the social media universe they came across. These experiences were thereafter “reassembled” under their own understanding, which has been part of a structuration and knowledge production process that has taken different turns. This means that “relation platforms” was the outcome of an active interpretation process, transpiring from retrospective interaction in situations the BG members experienced, which is based on making sense of a technology that manifested as ambiguous.

What then does the case story tell us? The beta group case story is a reminder of some of the same patterns established in the teacher case story. The structuration process gives insight on

the challenges actors face in working and introducing social media into organizations as a potential work practice. We learn that the Beta Group experienced success within its domain, but met challenges when crossing the boundaries where the role of social media is marginal. To achieve acceptance requires modifications to the BG's understanding of social media, involving a move from having an idealistic approach to including the institutional practices and governing logics of a public organization.

8.3.5 Research contributions of the social intranet portal case story

The social intranet case story is a contribution to organizational research on social media.²⁶ The case story confirms findings seen in other studies. These have documented that social media users have elaborate communicative strategies, reflected in a participatory divide and conscious role performance (Gibbs et al., 2013; Lüders, 2013; Mukkamala & Razmerita, 2014; Pettersen, 2014). The case story confirms findings that social media users can be strict on what type of information they share (Danis & Singer, 2008; Giordano, 2007; Grudin & Poole, 2010; Holtzblatt et al., 2010). On the other hand, the case story contributes new knowledge on the experiences and processes that actors perform in a public administration when acquiring and implementing a professional SNS.

In this regard, the case story adds knowledge by the following points, which are particular *nuances* of established research knowledge:

1. *Contradiction between intent and outcome of a measure:* The case study highlights a contradiction in a measure. The measure intended to simplify the work surface among employees in a public organization, but is interpreted instead to complicate work practice and create disengaged end-users.
2. *Self-censorship and sharing leads to informing practice and information overload:* The case story documents that employees have a dual approach in using a social intranet and ambivalent relationships towards information sharing. Employees monitor their news feeds and remain passive, while actively communicating on e-mail and chat software with colleagues. Sharing is performed a practice of distributing information and employees exercise strict criteria on what content they can share with others, leading to sharing being seen as an unmanageable work routine that it makes little sense to carry out.
3. *Interpret sharing from a different frame:* The case story teaches us that the end-users tended to interpret and approach the social intranet and sharing from different technological frames. The social intranet was interpreted often in light of the old intranet and how SNSs are used for informal communications and socializing.

What then does the local model, the *2.0 Social Intranet Portal*, represent? What can such a concept teach us about implementing social media into a public administration?

I have used the technological frames of Orlikowski and Gash (1994) and Barth's (1969) ethnic group and boundaries to understand what role human interpretation played when top management in a public organization decided to "import" a particular idea embedded in the social media universe – *sharing* – and introduce it to its employees by an implementation process to enhance organizational performance. This teaches us that sharing triggers commotion. Sharing challenges actors in organizational life to cross or adjust to an uncertain social boundary, which they often have no desire to cross. Sharing is an instrument that can

²⁶ These contributions are based upon the outline of research horizon presented in subsection 3.3.1.

solve organizational challenges, just as much as it is associated with risks and ambivalence. Sharing has a disorganizing capability, but unforeseen benefits. In our case, sharing's embedded relationship to social media is interpreted differently and changes according to which actor ascribes meaning to it. The social intranet case story is an example of how intentions and expectations of technology influence the actions and role performance of a group of employees. We learn that these conditions change especially when they are "pushed down" in the organizational hierarchy, bringing contradictions to the surface.

Orlikowski and Gash (1994) developed a social cognitive perspective on IT, finding that two groups in an organization had different assumptions, expectations, and knowledge about a technology. This was illustrated by the way that technology designers interpreted Notes as a *collaborative* technology that could change work practice and organizational conditions, from how end-users interpreted and used the same technology for *individual* purposes and communications. Similar patterns are seen in our case. There are differences, however. This difference relates to a classic challenge, which I believe a number of studies of implementation processes in organization studies have pointed out or is a common experience in organizational life – that the practical outcome of a measure when implemented differs from the original intent. Such differences are often explained in terms of translation and human interpretation. These conditions are seen in the implementation of *Jubel*. And simply speaking, *Jubel* is a top-management initiative aimed at simplifying the work day of the CA's employees, reducing internal boundaries, and creating organizational unity by sharing knowledge – which are good intentions – but when implemented, conflicting outcomes surface. The end-users attempted to comply with the new technology and its intentions by adopting and creating individualized user strategies. These demonstrate that a new social intranet, sharing, and sharing culture can be personally unmanageable and constitute a potential peril to work process, causing technology skepticism among end-users in first line positions.

8.3.6 Suggestions for future research

As researchers argue that more research work is needed on social media's role in organizational life, I generally agree with this. Below are my suggestions for future directions.

In educational research, researchers should continue to explore how learners and educators use social media. Areas of research could include:

- Researchers should continue to explore learners' *social media literacies and strategies*. Researchers should pay attention to how students traverse, understand, trust, and evaluate multiple types and sources of data they interact with. We need to know more about what learners do with the content they produce or consume; identify barriers to content creation and participation; develop new theory and practice and policies. Researchers could explore the transitions between formal and informal learning and identify motivators and factors to ease the flow between informal and formal learning.
- The arrival of smart phone apps involves challenges. This has meant that *audiovisual* and image based social media services are making their way into education systems. Audiovisuality entails new techniques for how to manage and organize learning processes, where the academic written text culture is challenged by interactive and participatory ways of learning. Educational researchers could for example explore how audiovisual services can be combined with other forms of social media in online communities and classroom situations.
- The development of *online social identities* can also be a research subject. Young people's engagement in the social media universe involves interaction with a range of

software, which they shape in close and complex interaction with education systems. Researchers could explore the particular ways and contexts where adolescents construct their social identities.

- Researchers should consider developing *theory-driven papers*. The social media landscape changes quickly. A crucial lesson from sociological and anthropological research is that theoretical concepts emerge as results of empirical analysis, implying that theory and data go hand-in-hand and are attached to particular areas and periods. If old theory is used to understand new matters, the question remains if we achieve suitable explanations at the matter at hand. For example, Social Network Theory was used under a different area when the Internet did not exist. I would recommend that researchers expand on old frameworks and use their creativity to come up with new relevant concepts. There is need for more theory to describe what is going on.

In organization science, researchers continue to explore topics that I have accounted for in my outline on current research horizon. Areas of interest could include:

- Organization researchers should continue to map how employees *use social media*. Organization researchers should address “the whys” and factors that encourage or prevent use of social media. Specifically, we need more knowledge on what role use and adoption of social media plays in relation to established work practices.
- Organization researchers could narrow their scope and develop research questions around specific themes. For example, we have learned that use of social media may be connected to particular groups and departments within organizations, which are prone to adopting faster than others. Moreover, research indicates that online engagement is formed and maintained by a small group of actors, while the majority remain disengaged. Hence, researchers could focus on establishing the factors and motivators on why employees decide to disengage from online participation.
- Organization studies need longitudinal studies. For example, studies have indicated that social media in organizations meet challenges in creating sustainable SNSs. Here, researchers could focus on identifying factors that could help to sustain online communities and motivators that contribute to increase online sharing.
- Finally, organization researchers should consider developing new theory. The discipline should engage in creative thinking and suggest new theory, which is based on empirical descriptions on use of social media. Such concepts could, for example, have different levels of abstraction, as we need both intuitive concepts that explain use of technology instantly as well as high-level theorizing.

8.3.7 Research limitations

As with all research, this study is not without limitations. There are certain matters I will address and acknowledge at this point.

First, I have performed a qualitative study. Choosing to do so entails shortcomings, as there are divided opinions on performing qualitative studies. The strongest objection against my work is that the quality and content of my research depends greatly on the individual researcher, ergo myself. This means that the research questions I have asked and the interpretations I have made can influence the data analysis and be difficult for other researchers to interpret. Moreover, this means I do not fulfill goals like scientific objectivity, although there are diverse views on what this means. Claims of objectivity can represent a form of subjectivity and can be seen as a form of belief and an instrument to institute legitimacy, for example. Another drawback is the impossibility of duplicating my study, which prevents other researchers from confirming or

denying my research results or interpretations. Also, organizational contexts differ, which means that if my study is replicated, other researchers will encounter other teachers and students and obtain other results. Another shortcoming is generalizability. To counter these methodological dilemmas, I wrote an extensive chapter on my research approach. Here, I outlined in great detail the research strategies I used during the progression of this study. The best way I could present my data was to have rather impersonal narration on use of social media and let my informants explain how they went about their business.

A second limitation is that this study may not have adequately framed the material properties of social media use in organizational life. Like with most social constructionist accounts of technology this study also has the limitation of putting its focus on the social side of technology, causing it to downplay the role of the material. To counter that shortcoming, for example, would have entailed more detailed analysis of technical features in social media services.

8.4 Part IV: Recommendation to practitioners

The study offers insights for practitioners in organizations to assist them to integrate social media services into their own practice. Below are my recommendations for practitioners.

Organize work practice on the premise of an activity and clear role-performance: A lesson from this study is that work practices should be constituted on the premise of an activity and definition of clear role performance. There are many collaborative social media services on the market. Practitioners should agree upon on what types of roles they take on when initiating work processes. We learned in research on the use of corporate wikis and in education systems that collaboration is a skill that has to be learned. A common way to solve this is to take different roles where some are “writers” while others are “readers” in the organizing of a project, for example.

Social media gives access to valuable resources: Social media can at first appear as a bewildering playground where the first impression is that many users are more into grooming and gossiping and indulging themselves in leisure activities. Such experiences can discourage new users from engagement in social media. On the other hand, there is an uncharted territory of people and information that is valuable and educational. The challenge is that these have to be located by the user, which means that any user has to perform a set of connecting practices and strategies to find the interesting and relevant resources. From the study, we learned that this demands that users must *network* and *filter* out the relevant from the irrelevant and become part of a community that fits their professional needs and interests. This means personal exploration where you set up yourself as node and build a personal learning network, where various social media software can be used to share and exchange ideas on themes that interests you. But these never come for free and are dependent on your own will and effort to engage with others. The good thing is that there is always someone looking for someone to engage with on social media. The task is to find each other.

Consider how you wish to present yourself digitally: Social media has a collective memory. This means that the Internet remembers and it is difficult to erase what you have published. Social media is about etiquette, which can be difficult to make sense of. And I believe social media users realize the significance of their actions *after* they have performed them. This means that grasping the meaning of *retrospection* is crucial and it is a term you should integrate into your vocabulary. This is a crucial skill to master. Social media users construct different approaches to how they interpret and enact information. What you consider as innocent, can be interpreted by others as something different, meaning that you are seldom in control of what

you share on social media. Many informants solve this by performing self-censorship and remain silent. From the study we learned the term “technological framing”, which means that humans interpret and have different expectations and assumptions on the impact of technology in organizational life. Users interpret and put their own labels on social media content, which means that this has impact on the extent to which they will engage with new contacts online. For example, in the SNS research on organizational use of Twitter, we learned that some users are “*In*-formers” while others are “*Me*-Informers”. It could be advisable to consider how personal you are when you present yourself professionally on social media and what you share. Should you inform about yourself to brand yourself or share information that is interesting and relevant to others? In general, when engaging on social media, present yourself as you would present yourself face-to-face. Not everything needs to be shared.

Use reflection with a colleague to make sense on what is going on: The research design used to tell the teacher and beta case stories are practical examples for practitioners to make sense of social media. The case stories emphasized understanding how organizations *emerge* from enacting actions by using personal reflection to understand the use of technologies in social contexts. For example, we learned how the teacher and the Beta Group members *first* planned and performed a social media practice and attempted to make sense of it *after* completing it by use of their reflection, which is repeatedly performed over a short or longer time frame, creating a process. I used this simple approach to make sense of social media. Moreover, I used my reflection and asked simple research questions in a dialogue with my informants – which centered around asking many “what-does-that-mean?” questions. This method might sound “unscientific”, but it assisted my informants greatly to grasp their practice and how they used social media in the ways they did. Furthermore, when they *read* about how their practice was described, this gave a benefit. Transferring this method to the practice field means that practitioners could *first* plan and complete a practice and create a shared frame of reference and ask each other simple questions on what they just performed. In the teacher case story, for example, many interviews were conducted right after class. The teacher had fresh experiences, which allowed her to put words on what she just had done. Practitioners can also interview each other. And it is a method that cost little resources. You only need a colleague with the time to listen and the wish to exchange experiences.

Sociological theory helps: Another recommendation is to use and engage with sociological theory to comprehend technology-in-practice. Unfortunately, sociological theory can be difficult to get your head around at first, but I believe it is not that demanding. Sociological theory is indeed relevant for understanding technology practices for several reasons. For example, technologies are never neutral and are embodied with values, norms, and deliberate intentions, which are seldom made quite clear, but have to be interpreted and debunked after they are used. Moreover, social media is becoming more and more *abstract* and is under continuous development, whereas it takes many years before textbooks explain the logic and reasons behind the technology. Social media can also, as a future network technology, start to play an important role in the working day of knowledge workers. There will be a need for empirical models explaining “what is going on”. The teacher and BG members resurface again as examples of actors who have used variants of sociological theory to understand their technology practice. Both actors have used variants of social network theory and social capital to achieve greater knowledge on how to use social media in their organizational context. In this regard, the BG members used the meaning of informal between colleagues as a way to address connecting strategies and resources in social networks, which are an embedded part of organizational life. In sociological terms, this is to address social capital and bonding and bridging strategies. The use of this theoretical framework helped the BG members greatly to

get a clear picture that successful adoption and implementation of professional SNSs into organization cannot only be accomplished by focusing on the *technology* itself. Other means are required too, foremost that communication and community belonging play an important role. You have to create an empirical framework that stresses the importance of participation in an online public dialogue and that engagement in it can bring benefits. Communication models are also a central part of implementation models. For the Beta Group members, use of sociological theory helped them to see the intent behind their social media practice and how to work with it practically. Moreover, they used sociological theory to create an organizational social media literacy.

Framing and strategizing is essential and it takes time to adopt social media: The study has indeed taught us that proponents of social media or technology enthusiasts in organizational life have to work uphill to achieve acceptance for their views and work. We see the pattern that early adopters can obtain success within the ranks of their own organization, but meet considerable skepticism when they go beyond it. This relates above all to how peers will accept their point of view as they all agree upon the same belief system. When crossing organizational boundaries and contexts, adopting social media from other bottom-up or top-down initiatives has proven to be demanding and requires a lot of work. This means that introducing social media into an organization cannot only be done technically, but it must also be done socially and culturally. For example, we learn from three of the case stories that this strategizing of social media is performed in three different ways. The teacher had to work with strategies *before* and *after* implementing her learning design, demonstrating that strategies performed while enacted are the most demanding and unpredictable to control. This way of performing strategies was *personally* demanding, meaning that the teacher had to play on many strings to achieve the results she wanted – creating a positive classroom atmosphere and teaching the students to write coherent texts. In the beta case story, we learned that developing understandable communicative practices on how to use social media is essential for attaining legitimacy among technology skeptics. This meant downplaying the “tool focus” and replacing it with a cultural message that informal talk between colleagues can lead to a positive outcome for the organization as a whole. In the social intranet portal, we learned about the contradictions and challenges in creating acceptance that sharing of work and knowledge about each other is important. This means that the type of metaphors and social wrapping you use to present social media appears to be essential to how willingly your audience will accept the message. The audience is most likely to be critical. To overcome that skepticism, my recommendation here, however, is that it is better to know the perspective and life world of your audience than to use a known recipe that “works”. It is imperative to connect with your audience and I believe that humans evaluate social media more on beliefs, symbolism, and values, than its material properties, affordances, and benefits. These need to be unlocked and debunked and given a positive value.

Social media means to learn continuously: The arrival of social media means that we are presented with new impressions continuously. Social media will most likely not go away but rather it will become integrated as part of our everyday lives, challenging how we communicate and interact with each other in organizational life. The greatest dilemma is that both the technology and the ways we communicate will be miles ahead and go separate ways before we have standardized knowledge explaining to us “what is going on”. This means that in order to stay updated on current events, practitioners will need to develop competences to learn continuously, implying that to be self-organized, collaborative, take initiative and manage to work in organizational life characterized by chaos and complexity will be important areas of mastery for future knowledge workers. This means that choice of online social networks, performance of connecting strategies, and resources are crucial knowledge. But the most

important lesson from the study is that navigating through a complex social media landscape with many changing impressions involves mastering cognitive abilities and processes assumptions on reality by retrospection, means that practitioners will learn *continuously*.

8.5 Part V: The social media plot question – what is the story here?

The role of social media in organizational life is a case of experimentation and learning, reflecting a larger phase in the ongoing global development of the Internet and network technologies making its way on to the turf of organizations – which I believe we are only starting to understand. Social media has certain material properties making it a distinct cloud technology we can access instantly, but this poses challenges for organizational application and understanding. Social media has become abstract, causing contestation of what it “is”, which means that it has to be managed by acts of interpretation and sensemaking, where retrospection has started play an important role. Furthermore, social media is characterized by media richness and is used in situations typified by complexity, chaos and self-organization, which again create conditions and expectations in which individuals must exercise caution to avoid risks. Humans avoid potential risks and challenges by not crossing an unknown social boundary – others do.

Today’s organizations are typified by flexibility and self-organization, which means giving their members autonomy to organize their work practices. This gives actors in organizations the possibility to adopt social media either by grassroots initiatives or by accepting top-down measures, which has been the main theme throughout this thesis. In cases where organizational members choose to do so, it involves crossing a social boundary and engaging with risk and ambiguity. This can lead to potential success or failure, but likewise to engaging in situations demanding the management and organization of the use of a technology that enables the potentiality to create emergent structures I have called models. Actors who adopt social media this way can experience potential success within their own ranks, but face challenges when jumping the fence to talk with others from another background. This implies that using social media from the inside out in organizational life is indeed a demanding task.

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Appendix

Table 1. Overview of data sample, number of interviews, affiliation and informants' backgrounds.

Interview no.	Form of interview	Duration	Informant no.	Gender	Position	Organizational context	Date
1.	Group	45 min	1.	M	Student	High school	Jan 18, 2012
			2.	M			Jan 25, 2012
2.	Group	35 min	3.	M	Student		Jan 25, 2012
			4.	M			Feb 1, 2012
3.	Group	25 min	5.	M	Student		Feb 1, 2012
			6.	M			Feb 8, 2012
4.	Group	30 min	7.	M	Student		Feb 8, 2012
			8.	M			March 7, 2012
5.	Group	20 min	9.	M	Student		March 7, 2012
			10.	M			March 14, 2012
6.	Ind.	30 min	11.	M	Student		March 14, 2012
			12.	M			Feb. 8, 2012
7.	Group	25 min	13.	M	Student		Feb. 8, 2012
			14.	M			March 7, 2012
			15.	F			March 8, 2012
8.	Group	55 min	16.	F	Student		March 7, 2012
			17.	F			March 8, 2012
			18.	F			March 14, 2012
			19.	F			March 28, 2012
9.	Group	30 min	20.	F	Student		March 28, 2012
			21.	M			March 29, 2012
10.	Group	20 min	22.	M	Student		March 29, 2012
			23.	M			Sep. 21, 2011
11.	Ind.	30 min	24.	F	Student		Oct. 5, 2011
			25.	F		Oct. 26, 2011	
12.	Group	30 min	26.	F	Student	Nov. 2, 2011	
			27.	F		10, Nov, 2011	
13.	Ind.	1 hour 25 min	27.	F	Teacher	Dec. 7, 2011	
14.	Ind.	1 hour 15 min	27.	F	Teacher	Jan. 4, 2012	
15.	Ind.	2 hours 10 min	27.	F	Teacher	Jan. 18, 2012	
16.	Ind.	1 hour 10 min	27.	F	Teacher	Jan. 25, 2012	
17.	Ind.	30 min	27.	F	Teacher	Feb. 1, 2012	
18.	Ind.	1 hour 20 min	27.	F	Teacher	Feb. 8, 2012	
19.	Ind.	1 hour 10 min	27.	F	Teacher	March 7, 2012	
20.	Ind.	40 min	27.	F	Teacher		
21.	Ind.	40 min	27.	F	Teacher		
22.	Ind.	1 hour 10 min	27.	F	Teacher		
23.	Ind.	25 min	27.	F	Teacher		
24.	Ind.	1 hour 20 min	27.	F	Teacher		

Interview no.	Form of interview	Duration	Informant no.	Gender	Position	Organizational context	Date
25.	Ind.	1 hour 30 min	27.	F	Teacher	IT Department, town hall, city municipality	March 14, 2012
26.	Ind.	2 hours 30 min	28.	M	IT Consultant		Dec. 14, 2011
27.	Ind.	1 hour 15 min	28.	M	IT Consultant		Jan. 24, 2012
28.	Ind.	1 hour 25 min	28.	M	IT Consultant		Feb. 9, 2012
29.	Ind.	1 hour min	28.	M	IT Consultant		March 26, 2012
30.	Ind.	55 min	29.	F	M & C Adviser		March 13, 2012
31.	Ind.	1 hour	30.	M	M & C Adviser		Feb. 21, 2012
32.	Group	2 hours	28.	M	IT Consultant		June 20, 2012
			29.	F	M & C Adviser		
			30.	M	M & C Adviser		
			31.	M	IT Training		
33.	Ind.	1 hour	32.	F	Advisor	County Authority	Aug. 27, 2013
34.	Ind.	1 hour	33.	F	Middle Manager		Aug. 30, 2013
35.	Ind.	1 hour	34.	F	Advisor		Sep. 5, 2013
36.	Ind.	1 hour	35.	F.	Ex. Director		Feb. 10, 2014
37.	Ind.	1 hour	36.	M	Advisor		Feb. 17, 2014
38.	Ind.	1 hour	37.	M	Advisor		Feb. 18, 2014
39.	Ind.	1 hour	38.	F	Advisor		Feb. 18, 2014
40.	Ind.	1 hour	39.	M	Advisor		Feb. 19, 2014

Table 2. Completed interviews with teacher, indicating interview number, date, duration and topics covered.

Interview no.	Date	Duration	Topic
1.	September 21, 2011	1 hour, 25 minutes	Reflecting on class
2.	October 5, 2011	1 hour, 13 minutes	Reflecting on class
3.	October 26, 2011	2 hours, 8 minutes	Reflecting on class
4.	November 2, 2011	1 hour, 9 minutes	Reflecting on class
5.	November 10, 2011	33 minutes	Reflecting on class
6.	December 7, 2011	1 hour, 20 minutes	Summary of fall
7.	January 4, 2012	1 hour, 10 minutes	Reflecting on class
8.	January 18, 2012	40 minutes	Reflecting on class
9.	January 25, 2012	40 minutes	Reflecting on class
10.	February 1, 2012	1 hours, 10 minutes	Evaluation of Web 2.0 app.
11.	February 8, 2012	25 minutes	Modes of working patterns
12.	March 7, 2012	1 hour, 20 minutes	National curriculum
13.	March 14, 2012	1 hour, 30 minutes	Sharing on social web

Table 3. *Interviews conducted with students.*

Interview no.	Form of interview	Informant no.	Gender	Age	Study program	Subject	Level in school	Date	Duration
1.	Group	1.	M	17	Vocational Studies	English	2 nd year	Jan. 18, 2012	45 min
		2.	M	17					
2.	Group	3.	M	17	Vocational Studies	English	2 nd year	Jan. 25, 2012	35. min
		4.	M	17					
3.	Group	5.	M	17	Vocational Studies	English	2 nd year	Feb. 1, 2012	25. min
		6.	M	17					
4.	Group	7.	M	17	Vocational Studies	English	2 nd year	Feb. 8, 2012	30 min
		8.	M	17					
5.	Group	9.	M	17	Vocational Studies	English	2 nd year	March 7, 2012	20 min
		10.	M	17					
6.	Ind.	11.	M	17	Vocational Studies	English	2 nd year	March 14, 2012	30 min
7.	Group	12.	M	16	General Studies	Spanish	1 st year	Feb. 8, 2012	25 min
		13.	M	16					
		14.	M	16					
8.	Group	15.	F	16	General Studies	Spanish	1 st year	March 7, 2012	55 min
		16.	F	16					
9.	Group	17.	F	16	General Studies	Spanish	1 st year	March 8, 2012	30 min
		18.	F	16					
		19.	F	16					
		20.	F	16					
10.	Group	21.	M	16	General Studies	Spanish	1 st year	March 14, 2012	20 min
		22.	M	16					
11.	Ind.	23.	M	16	General Studies	Spanish	1 st year	March 28, 2012	30 min
12.	Group	24.	F	16	General Studies	Spanish	1 st year	March 29, 2012	30 min
		25.	F	16					
		26.	F	16					

Table 4. *Overview of field observations in classroom.*

Field observation no.	Date	Duration in school hours (45 min blocks)	English vocational studies, no. of school hours	Spanish, general studies, no. school of hours
1.	.September 21, 2011	2 school hours	2 school hours	-
2.	.October 5, 2011	2 school hours	2 school hours	-
3.	.October 26, 2011	2 school hours	2 school hours	-
4.	.November 2, 2011	2 school hours	2 school hours	-
5.	.November 10, 2011	2 school hours	2 school hours	-
6.	.December 8, 2011	2 school hours	2 school hours	-
7.	.January 4, 2012	4 school hours	2 school hours	2 school hours
8.	.January 5, 2012	2 school hours	-	2 school hours
9.	.January 18, 2012	4 school hours	2 school hours	2 school hours
10.	.January 19, 2012	2 school hours	-	2 school hours
11.	.January 25, 2012	4 school hours	2 school hours	2 school hours
12.	.January 26, 2012	2 school hours	-	2 school hours
13.	.February 1, 2012	4 school hours	2 school hours	2 school hours
14.	.February 2, 2012	2 school hours	-	2 school hours
15.	.February 8, 2012	4 school hours	2 school hours	2 school hours
16.	February 9, 2012	2 school hours	-	2 school hours
17.	March 7, 2012	4 school hours	2 school hours	2 school hours
18.	.March 8, 2012	2 school hours	-	2 school hours
19.	.March 14, 2012	4 school hours	2 school hours	2 school hours
20.	.March 15, 2012	2 school hours	-	2 school hours
21.	.March 28, 2012	4 school hours	2 school hours	2 school hours
22.	.March 29, 2012	2 school hours	-	2 school hours

Table 5. *Informants' backgrounds in the beta case.*

RESPONDENT NO.	IND OR GROUP INTERVIEW	GENDER	DEPARTMENT	POSITION	EDUCATION	WORK TITLE	NUMBER OF INTERVIEWS CONDUCTED
1.	I / G	M	IT	Leader	Master	IT-Consultant	4
2.	G	M	IT	Member	Master	Training Consultant	1
3.	I / G	F	M & C	Member	Master	M & C Adviser	2
4.	I	M	M & C	Member	Master	M & C Adviser	2

Table 6. *Interviews conducted with informants in the beta group.*

INTER NO.	INFOR. NO.	INDOR GR.	DATE	DURATION	TOPIC
1.	1.	I	.December 14, 2011	2 hours 30 minutes	The group's history
2.	1.	I	.January 24, 2012	1 hour 15 minutes	Working the Web 2.0 way
3.	1.	I	.February 9, 2012	1 hour 25 minutes	Use of Social Network Sites
4.	1.	I	.March 26, 2012	1 hour minutes	Classification of Social Media
5.	3.	I	.March 13, 2012	55 minutes	Use of Facebook
6.	4.	I	.February 21, 2012	1 hour	Use of Twitter
7.	1., 2., 3.	G	.June 20, 2012	2 hours	Concluding interview

Table 7. *Interviews and data sample in the CA.*

INTER NO.	Gender	Position	DURATION	DATE
1.	F	Advisor	1 hour	.Aug. 27, 2013
2.	F	Middle Manager	1 hour	.Aug. 30, 2013
3.	F	Advisor	1 hour	.Sep. 5, 2013
4.	F	Ex. Director	1 hour	.Feb. 12, 2014
5.	M	Advisor	1 hour	.Feb. 10, 2014
6.	M	Advisor	1 hour	.Feb. 17, 2014
7.	F	Advisor	1 hour	.Feb. 18, 2014
8.	M	Advisor	1 hour	.Feb. 18, 2014

Intervjuguide/temaguide – skole/unge mennesker

Om prosjektet: “Phd-studie del av stor-prosjektet *Bruk av sosiale medier for samskapning og tilpasning av systemutviklingsmetodikk i offentlig sektor*. Mitt anliggende er å gjøre en sammenligning av bruk av sosial medier i skolen og kommunal sektor. I korte trekk har jeg lyst til å finne ut hvordan folk bruker sosiale medier i sin arbeidssituasjon og hvilken læring man eventuelt får ut av det. Jeg understreker at studien er frivillig og du/dere kan når som helst trekke dere fra prosjektet. Alle data blir anonymiserte og jeg vil ikke bruk navn på informanter, hvis det blir aktuelt å bruke sitater i skriftlige henvisninger.”

Utdeling av informasjonsskriv, samtykke.

Bakgrunnsopplysninger om informant: Alder/kjønn?
Skole? Nivå?
Studieretning?
Utdanning?

1. Basisforståelse/grunnleggende kunnskap

- Hva forstår du som sosiale medier?
 - Hva forbinder du med sosiale medier?
 - Er det mer enn kun Facebook, Twitter og blogging? Andre ting?
 - Når og hvor var første gang du hørte om det?
 - Hvem forbinder du med bruk av sosiale medier? Hvor blir det brukt? det?
 - Ser du på e-post og SMS som sosiale medier?
 - Andre relevante forhold/forståelser?

2. Bruk av sosiale medier/grunnleggende individuell bruk

- Hvordan vil du beskrive din bruk av sosiale medier, sånn generelt?
 - Fortell om hvordan du bruker det?
 - Hvordan er din nettatferd? Hvordan vil du beskrive den, sånn generelt?
 - Når og hvor skjer det? Mest fritid/arbeidstid?
 - Er du en som engasjerer deg på nett? J/N? Hvorfor? Hvorfor ikke?
 - Er det visse type er sosiale medier du holder deg unna? Hvorfor det?

3. Bruk av sosiale medier/tid & sted-dimensjoner

- Kan du beskrive generelt når og hvor du bruker sosiale medier?
 - Er du mest aktiv på morgenen eller kvelden? Hvilket tidspunkt passer best?
 - Må du være “online” hele tiden, eller klarer du å slå av etter bruk?
 - Er det noen steder du bruker sosiale medier? Hjemme, bussen, mens du kjører?
 - Er du veldig konsentrert når du bruker sosiale medier, eller bruker du det sånn “av og på” etter bruk? Når og hvor skjer dette? Ofte?
 - Bruker du sosiale medier når du kjeder deg? Skjer dette på noe bestemt sted?

4. Engasjement/aktivitet på sosiale medier

- Hvordan vil du beskrive din nettatferd?
 - Er du aktiv/passiv? Hvordan vil du beskrive deg selv?
 - Hvorfor velger du å være passiv/aktiv? Hvorfor er dette viktig/uviktig?
 - Er det noen sosiale medier du er mer aktive på enn andre? Hvilke? Hvorfor akkurat disse?
 - Er du fast deltaker på mange ulike sosiale medier, eller begrenser du deg til et par? Hvorfor er du aktiv/passiv?
 - Er du en som engasjerer seg eller ser du på andre delta på nettet?
 - Er det visse ting som kan sies på nettet, noe som ikke kan sies?

5. Kjedsomhet/tidstyv/vern av tid

- Er det nødvendig å bruke tid på sosiale medier? Stjeler dette tid?
 - Hvorfor det?
 - Erfarer du at du må “verne” om din tid og dine aktiviteter, i forhold til bruk av sosiale medier?

6. Teknologibruk – stasjonær versus sømløs bruk

- Er det noen spesiell type teknologi du bruker når du bruker sosiale medier? Jeg tenker her på om du bruker laptop/smartphone/Ipad eller andre teknologier?
 - Hva foretrekker du å bruke? Hvorfor akkurat den type teknologi?
 - Hvilken teknologi bruker du? Smarttelefon, laptop, Ipad andre typer teknologier?
 - Har bruken av nevnte type teknolog noe å si for kvaliteten på bruken sosiale medier?
 - Har brukergrensesnittet noe å si for din bruk? Hva er dette? Kan du si noe om dette?

7. Nettverk på nett og IRL (in real life)? De samme/eller forskjellig?

- Hvem er du venner med eller følger mest på nettet?
 - “Virkelige venner”, naboer, slektninger? Andre?
 - Forskjell på dem man treffer på sosial medier og IRL?

8. Læring av sosiale medier på skolen?

- Lærer du noe av å bruke sosiale medier i skolesammenheng? Hva lærer du?
 - Følger du mer med i timene ved å bruke sosiale medier? Hvorfor?
 - Er du med i Facebook-gruppe som knytter seg direkte til undervisningen? Hvilket utbytte har du av dette, sett ut fra hva du lærer?
 - Er det forskjell når en lærer oppretter en FB-gruppe enn når dere sjøl oppretter det? For eksempel om den brukes og hva som sies? Hvorfor det?
 - Kan dere mer om sosial medier enn læreren?
 - Gjør dere lekser via Facebook? Hvilke erfaringer får du fra denne bruken?
 - Hva lærer man over tid ved å bruke sosiale medier? Kan du beskrive dette?
 - Er det nytting å bruke sosiale medier i skolesammenheng? Hvorfor?
 -

9. Bruk av sosiale medier fritid/skole– ulikheter/likheter

- Hva er forskjellen på å bruke sosiale medier på fritiden og i skolesammenheng? Har du erfaringer her?
 - Hvordan opptrer du på sosiale medier i skolesammenheng? Er dette forskjellig fra hvordan dere gjør det på fritiden?

10. Kommunikasjon på sosiale medier

- Hva snakker dere mest om på sosiale medier?
 - Hva er det som engasjerer dere?
 - Det man sier på sosiale medier, får dette konsekvenser andre steder? Hvordan?
 - Er det visse ting man kan si på nettet og noe man kan si? Hvor går grensene?

Intervjuguide/temaguide – skole/kommunal forvaltning

Om prosjektet: “Phd-studie del av stor-prosjektet *Bruk av sosiale medier for samskapning og tilpasning av systemutviklingsmetodikk i offentlig sektor*. Mitt anliggende er å gjøre en komparativ/sammenligning av bruk av sosial medier i skolen og kommunal sektor. I korte trekk har jeg lyst til å finne ut hvordan folk bruker sosiale medier i sin arbeidssituasjon og hvilken læring man eventuelt får ut av det. Jeg understreker at studien er frivillig og du/dere kan når som helst trekke dere fra prosjektet. Alle data blir anonymiserte og jeg vil ikke bruk navn på informanter, hvis det blir aktuelt å bruke sitater i skriftlige henvisninger.”

Utdeling av informasjonsskriv, samtykke.

Bakgrunnsopplysninger om informant: Alder/kjønn?
Stilling?
Utdanningsnivå?
Sektortilhørighet?

1. Basisforståelse/grunnleggende kunnskap

- Hva forstår du som sosiale medier – generelt? Forslag til definisjoner?
 - Hva forbinder du med sosiale medier?
 - Er det mer enn kun Facebook, Twitter og blogging? Andre ting?
 - Når og hvor var første gang du hørte om det?
 - Hvem forbinder du med bruk av sosiale medier? Hvor er typiske forum at det blir brukt? Er det kun på nettet eller andre steder? Hva tror du om det?
 - Ser du på e-post og SMS som sosiale medier?
 - Andre relevante forhold/forståelser?

2. Bruk av sosiale medier/grunnleggende individuell bruk

- Hvordan vil du beskrive din bruk av sosiale medier, sånn generelt?
 - Fortell om hvordan du bruker det?
 - Hvordan er din nettatferd? Hvordan vil du beskrive den, sånn generelt?
 - Når og hvor skjer det? Mest fritid/arbeidstid?
 - Er du enn som engasjerer deg på nett? J/N? Hvorfor? Hvorfor ikke?
 - Er det visse type er sosiale medier du holder deg unna? Hvorfor det?

3. Bruk av sosiale medier/tid & sted-dimensjoner

- Kan du beskrive generelt når og hvor du bruker sosiale medier?
 - Skjer dette på jobb? På fritiden?
 - Er du mest aktiv på morgen eller kvelden?
 - Må du være “online” hele tiden, eller klarer du å slå av etter bruk?
 - Er det noen steder du bruker sosiale medier? Hjemme, på bussen, mens du kjører?
 - Er du veldig konsentrert når du bruker sosiale medier, eller bruker du det sånn “av og på” etter bruk? Når og hvor skjer dette? Ofte?
 - Bruker du sosiale medier når du kjeder deg? Skjer dette på noe bestemt sted?

4. Engasjement/aktivitet på sosiale medier/individuelle perspektiv (derom relevant)

- Hvordan vil du beskrive din nettatferd?
 - Er du aktiv/passiv? Hvordan vil du beskrive deg selv?
 - Hvorfor velger du å være passiv/aktiv? Hvorfor er dette viktig/uviktig?
 - Er det noen sosiale medier du er mer aktive på enn andre? Hvilke? Hvorfor akkurat disse?
 - Er du fast deltaker på mange ulike sosiale medier, eller begrenser du deg til et par? Hvorfor er du aktiv/passiv?
 - Er du en som engasjerer seg eller ser du på andre delta på nettet?
 - Er det visse ting som kan sies på nettet, noe som ikke kan sies?
 - Forbinder du nettet med et offentlig sted, som for eksempel avis eller en park?
 - Er det høy eller lav terskel for å delta?

5. Kjedsomhet/tidstyv/vern av tid

- Er du enig at sosiale medier er en tidstyv som tar bort fokus fra viktige aktiviteter?
 - Hvorfor det?
 - Er det en tidstyv?
 - Erfarer du at du må “verne” om deg sjøl og dine aktiviteter, i forhold til bruk av sosiale medier?

6. Teknologibruk – stasjonær versus sømløs bruk

- Er det noen spesiell type teknologi du bruker når du bruker sosiale medier? Jeg tenker her på om du bruker laptop/smartphone/Ipad eller andre teknologier?
 - Hva foretrekker du å bruke? Hvorfor akkurat den type teknologi?
 - Hvilken teknologi bruker du? Smarttelefon, laptop, Ipad andre typer teknologier?
 - Har bruken av type teknolog noe å si for kvaliteten på bruken sosiale medier?
 - Har brukergrensesnittet noe å si for din bruk? Hva er dette? Kan du si noe om dette?

7. Nettverk på nett og IRL (in real life)? De samme/eller forskjellig?

- Hvem er du venner med eller følger mest på nettet?
 - “Virkelige venner”, naboer, kollegaer, slektninger+
 - Forskjell på dem man treffer på sosial medier og IRL?

8. Læring av sosiale medier – individuelt

- Lærer du noe av å bruke sosiale medier? Hvilken læring er dette?
 - Er dette en nytting læring? Hvorfor/hvorfor ikke?
 - Er du medlem i communities der det handler å dele erfaring? Hvilken erfaring er dette
 - Hva lærer man over tid ved å bruke sosiale medier? Kan du beskrive dette?

9. Bruk av sosiale medier jobb/fritid – ulikheter/likheter

- Har du erfaringer med å bruke sosiale medier i jobbsituasjon?
 - Bruker du sosiale medier på jobb enn på fritiden? Hvordan vil du beskrive dette?
 - Hvordan opptrer du på sosiale medier i arbeidssituasjon?
 - Har sosiale medier i ditt tilfelle vært med å gjøre forskjeller mellom jobb og fritid tvetydige/uklare?

Spørsmål lærer:

Tegn oppe tabellen på tavla. Hvordan vil du beskrive at elevene i spansk og yrkesfagklassen din jobber innenfor de seks ulike mediene:

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

- Hvor lykkes du innen de ulike mediene?
- Hvor møter du motstand? Hvordan og hvorfor?
- Hvor ofte erfarer du at du er en «igangsetter» av arbeidsoppgaver som gis til elevene?
- Hvor ofte erfarer du at det er elever sjøl som tar initiativ til arbeidsoppgaver?
- Hvor ofte har elevene levert inn arbeidsoppgaver i tide?
 - Hvordan er dette i spansk- og engelskklassen?
- Hvor ofte erfarer du at elever spør om utsettelse av innleveringsoppgaver?
 - Hvordan er forskjellen mellom spansk- og engelskklassen?
- Hvordan erfarer du at elever klarer å ta imot instruksjoner, når de skal jobbe med gruppeoppgaver? Når er det de lykkes, når er det de får det til?
- Hvor mye må du jobbe med for at elever forstår beskjeder og kan sette i gang oppgaver?

Spørsmål lærer:

- Generelt; hvordan vil du beskrive at elevene jobber i spansk- og engelskklassen?
- Hvordan er elevene til å jobbe individuelt i spansk- og engelskklassen?
- Hvordan er elevene til å jobbe i grupper i spansk- og engelskklassen?
- Når jobber/jobber ikke elevene individuelt i spansk- og engelskklassen?
- Når jobber/jobber ikke elevene i grupper i spansk- og engelskklassen?
- Hvor lykkes elevene når de jobber individuelt?
- Hvor møter de motstand når de jobber individuelt?
- Hvor lykkes de når elevene jobber i grupper?
- Hvor møter de motstand når de jobber i grupper?
- Hvor ofte baserer du din undervisning på individuelt arbeid?
- Hvor mye baserer du din undervisning på gruppearbeid/oppgaver?
- Hvilke elever mestrer/mestre ikke individuelt/gruppearbeid?
- Hva må til for at elever skal kunne jobbe godt individuelt/i grupper?

Hvordan vil du beskrive at elevene i spansk og yrkesfagklassen din jobber innenfor de seks ulike mediene, i forhold til å være individ og gruppeorientert?

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

- Hvordan vil du beskrive måten dere jobber på?
- Hva er karakteristisk for måten du/dere jobber på?
- Er den forankret mot avdelinger? På tvers av avdelinger? Hvordan fungerer dette?
- De årene som dere har jobbet med sosiale medier som en del av arbeidsdagen. Hvordan jobbet dere i starten? Hvordan jobber dere nå? Forskjeller/likheter?
- Oppnår dere målsetting med å få til samhandling gjennom bruk av sosiale medier?
- Hva er grunnene og/eller årsakene til at ansatte ikke vil ta i bruk sosiale medier?
- I hvor stor grad har dere hatt frihet til å definere måten du/dere jobber på?
- Jobber dere i nettverk og eller er det nettverksbasert? På hvilken måte?
 - Vil du si at dere jobber i nettverk? Hvordan vil du beskrive dette?
- Har dere noen klar arbeidsinstruks? Hvordan vil du beskrive den?
- Hva er de viktigste arbeidsoppgavene dere har?
- Hvordan jobber du/dere i forhold til ulike sosiale medier?
 - Hvordan er det å blogge?
 - Hvordan er det å twittle?
 - Hvordan er det å bruke FB?
 - Andre typer medier?
- Hvilket medium er mest krevende/letttest å jobbe med?
- Hvordan fungerer deling av erfaringene dere har gjort dere med bruk av sosiale medier til andre i organisasjonen?
- Hvem kommuniserer dere med?
- Hvem kommuniserer og/eller tar kontakt med dere?
- Hvordan fordeler dere arbeidsoppgavene? Kan du beskrive dette?
- Hvordan vil du beskrive organisasjonskulturen der du jobber?
 - Noe karakteristisk?
 - Hva særpreger den?

Intervjuguide leder

To temaer – ROS-analyser og bruk av ulike typer sosiale medier

ROS-analyser

- Hva er ROS-analyser?
 - Kan du beskrive dette?
- Følger dere den offentlige malen som er oppgitt eller har dere utviklet en egen?
 - Hva er forskjellen og likheter?
- Hva bruker dere dette til?
- Fungerer det bra som et verktøy? Ja/Nei? Hvorfor?
- Når begynte dere å bruke det?
- Kan du gi eksempler på hvor det er brukt?
- Er det noen risikoer forbundet med sosiale medier? Hva er eventuelt disse?
- Hvilke problemstillinger møter dere på i ROS-analyser?
- Hvor ofte har dere gjort dette?
- Er ROS-analyser del av en prosess? Hvordan utarter denne seg?

Bruk av ulike typer sosiale medier

Hvordan vil du beskrive at dere jobber innenfor de seks ulike mediene:

Hvordan vil du beskrive at aktive brukere av sosiale medier i kommunen er blant de ulike sosiale mediene i tabellen?

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

- Hvor lykkes du/dere innen de ulike mediene?
- Hvor møter du/dere motstand? Hvordan og hvorfor?
- Hva er fordelene og ulempene med de ulike mediene?
- Er det forskjeller og likheter på disse «internt» og «eksternt»?
- Hvilket av disse mediene fungerer bra/dårlig som «arbeidsverktøy»?
- Hvilke av verktøyene er det som tilrettelegger for samhandling?
 - Hvor ligger potensialet?
- Hvilke av verktøyene er det fungerer som «informasjonskanaler»?
- Er chat og e-post sosiale medier?
- Hvorfor har det vært viktig å få ledere til å blogge?
 - Hvilken effekt har det?
 - Skaper det legitimitet?
- Hvilke av mediene er det som skaper/har potensialet til å få til den deltakelse mellom ansatte?
- Er det noen av mediene som hindrer deltakelse?
 - Hvorfor det? Hva er grunner til dette?
- Hvilke medier er det ansatte er mest aktive på og hvilke medier er det ansatte tar med seg inn i kommunen og er mest fortrolige med?
 - Har du erfaringer med det?
- Hvilke medier er det lettest for andre kommunalt ansatte å ta i bruk?
- Hva er de vanligste mot-argumentene som dere møter blant ansatte for ikke å ta i bruk sosiale medier?
 - Hvilke problemstillinger møter dere på?

Intervjuguide, avslutning

- Hvordan vil dere beskrive status for det arbeidet som dere har gjort det siste året?
 - Noen nye erfaringer? Hva er disse?
 - Nye problemstillinger som har dukket opp?
 - Har det vært noen mål for arbeidet deres? Er disse nådd?
- Hvordan vil dere beskrive nedslagsfeltet for å bruke sosiale medier i organisasjonen?
 - Bruker folk det mer nå enn før, eller mindre?
 - Er det noen deler av organisasjonen som mer eller mindre skeptiske til å ta det i bruk?
- Er dere fremdeles i en implementeringsfase, eller har bruker ansatte sosiale medier som del av en ordinær arbeidspraksis? Hvilke erfaringer har dere gjort dere her?
- Hvilken strategi jobber dere etter for å få andre til å ta bruk sosiale medier i organisasjonen? Er det noen? Har det vært noen?
 - Har det bygget seg opp en? Hvordan vil dere beskrive denne?
- Å bruke sosial medier i kommunen; handler dette om å bruke web 2.0 plattformer eller handler dette om menneskelige relasjoner? Hvor trykker skoen?
- Hva har vært de viktigste innsalgsargumentene dere har brukt for at ansatte skal ta i bruk sosiale medier?
- Hvordan går det med forankringsarbeidet? Hva består dette arbeidet av?
- Får dere noen tilbakemeldinger på ansatte begynner å jobbe annerledes?
 - Tar de i bruk nye verktøy? Kan dere gi noen eksempler?
 - Blir det informeringsverktøy eller blir det en dialog?
- Hvilken form får sosiale medier i organisasjonen?
 - Hvordan tolkes det?
 - Kan dere gi noen eksempler?
- Får dere noen tilbakemeldinger eller har dere gjort noen erfaringer på om det oppstår samhandling? Begynner ansatte å samhandle på noen som helst måte?
 - Foregår det deling? Hvordan? Kan dere gi eksempler?
- Implementerer dere en kultur for deling gjennom sosiale medier?
- Hvordan oppstod behovet for sosiale medier? Er det et behov? Hvordan skal det fylles?
- Hvordan oppstår idéene for å formidle bruk av sosiale medier er viktig?
 - Hvor henter dere inspirasjon fra?
 - Har dere fått nye ideer sjøl?

- Har dere endret rolle i hvordan dere opptrer på sosiale medier?
- Har dere opplevd noen form for avkastning på arbeidet dere har lagt ned?
- Hva har dere lært av det arbeidet dere har gjort?

Yammerbruk

- Bakgrunn for bruk
 - Når tok dere i bruk yammer?
 - Hva visst du/dere om yammer?
 - Hva sa andre om yammer?
 - Positive og negativ ting?
- Hvordan har responsen vært etter kursene?
 - Positive/negative
 - Hvem er det som har tatt det i bruk?
 - Hvilke deler av organisasjonen?
 - Er det noen spesielle personer/grupper som tar det mer i bruk?
 - Er det noen som ikke har tatt det i bruk?
- Nettverksstruktur og funksjoner
 - Hvordan vil du/dere beskriver yammer og brukergrensesnittet?
 - Hvilket sosialt nettverk er det likt/ulikt?
 - Er det lett å forstå/vanskelig og skjønne?
- Følgere og gruppeaktivitet/nettverk
 - Har dere mange følgere?
 - Ansatte fra egen avdeling eller fra andre?
 - Hvem følger dere? Har dere stort nettverk?
 - Er det noen som er viktig å følge enn andre?
 - Hvem er dette?
 - Er det noen ressurspersoner som er viktig i ditt/deres nettverk?
 - Er dere aktive innen nettverk for egen organisasjon eller utenfor organisasjon?
 - Hva likheter og ulikheter her?
- Kommunikasjon og aktivitet
 - Er du/dere aktiv passiv?
 - Deler du/dere? Hvordan gjøres dette?
 - Skriver du/dere statuser, kommenterer andres statuser eller liker dere?
 - Hvordan gjøres dette? Utvikles det vaner?
 - Hvordan vil du/dere beskrive dette?
 - Hvordan er “etiketten” på yammer?
 - Hvordan vil dere beskrive denne?

- Kommunikasjonens innhold?
 - Hvilke problemstillinger er det du/dere diskuterer yammer til?
 - Hvordan brukes yammer til å få innspill på arbeidsoppgaver du/dere jobber med?
 - Er yammer et egnet verktøy til å diskutere problemstillinger relatert til dine ordinære arbeidsoppgaver?
- Hvorfor har dere tatt i bruk?
 - Eget initiativ?
 - Oppfordret av andre? Hvem?
 - Har det vært terskel for å ta det i bruk?
- Filtrering av informasjon
 - Hvordan bruker dere yammer til å filtrere vekk det irrelevante og få inn det relevante?
 - Har det utviklet seg egne yammer?
- Hva kan publiseres og kan ikke publiseres?
 - Er det noe som ikke er passende å publisere?
 - Er det noe som blir publisert på yammer som blir definert som “spam”?
- Bruk over tid
 - Har din/deres bruk av yammer endret seg over tid?
 - Hva er dine erfaringer? Kan du beskrive dette?
- Samarbeid
 - Har bruk av yammer betydd at du jobber på en annen måte enn før?
 - Samarbeider du/dere med andre som følge av yammerbruk? Hvem er dette?
- Læring
 - Hva har du lært av å bruke yammer?
 - Blir du smartere av å bruke yammer? Er det smart å bruke yammer?
 - Utvikler du/dere læringsnettverk gjennom bruk av yammer? Hvem lærer du/dere mest av? Hvem er ressurspersonene?
- Hva er utfordringene med å bruke yammer?
- Hva er statusen å bruke yammer i din/deres organisasjon?

Spørsmål om twitter

- Hvorfor begynte dere med twitter?
- Når begynte dere med dette?
- Hvordan vil du beskrive en typisk uke på twitter for din del?
 - Hva skjer? Noe mønster?
- Hva er dine viktigste erfaringer i bruken av twitter, i kraft av rollen som leder?
 - Kan du gi noen kjennetegn?
- Hvordan var det å lære seg twitter? Kan du beskrive læringsprosessen fra start til nå?
 - Var det viktige faser? Hvordan var disse?
- Organisering av twittertjenesten
 - Hvordan har dette organisert dette?
 - Hvordan har dere organisert dette i kommunen?
 - Hvor mange kontoer har dere som dere betjener?
 - Hvem er mest aktiv og hvorfor?
- Hvordan «fungerer» twitter?
 - Hva er dine erfaringer på dette feltet?
 - Hvordan vil beskrive twitter som fenomen?
- Hvordan forholder du deg til twitter i kraft av å være leder?
 - Privat/offentlig?
 - Hvilken balansegang? Kan du utdype dette?
- På hvilken måte er twitter forskjellig fra Facebook?
 - Kan du beskrive dette?
- Kan du beskrive dette fenomenet med «følgere»?
 - Hvem følger dere?
 - Er dere bevisst på hvem dere følger eller er dette vilkårlig?
 - Må dere kjenne/vite om menneskene for å følge dem? Hvor viktig er dette?
- Dere har over 1000 følgere. Hvordan organisere dere og siler ut informasjon i strømmen?
 - Hva kreves av deg/dere?
- Hva kommuniserer dere?
 - Hvem kommuniserer dere mest/mest med?
 - Hvorfor er det viktig å bruke twitter?
- Hvilken rolle har kommunens retningslinjer for din rolle og måter å kommunisere på twitter?
 - Er det noen klare «kjøreregler»?

- Er det noen «kjøreregler» måter å kommunisere på twitter som forskjellig fra kommunes retningslinjer?
- Hvordan organiserer og/eller tilnærmer du/dere henvendelser fra publikum?
 - Hva er de vanligste henvendelsene?
- Hvordan håndterer dere vanskelig/utfordrende henvendelser fra publikum?
 - Kan du gi noen eksempler?
 - Hva fører dette til og hva lærer man av det?
- Hvordan jobber dere med å forankre twitter som verktøy?
 - Hva slags innsalgsargumenter bruker dere?
 - Hvor møter dere motstand? Hvem er tilhengere av twitter i kommunen?
- Etter din erfaring, hva slags mennesker er mest aktiv på twitter?
 - Hvem er «typiske» twitterbrukere?
- Dere har beskrevet twitter som en «lyttepost». Hva mener dere med det?
- Hvilken nytte har twitter for dere og kommunen?
 - Hvorfor er det et godt verktøy?
 - Hvorfor er det ikke et godt verktøy?

Intervjuguide

1. Bakgrunnsopplysninger om informant:

2. Grunnleggende bruk

- Hvilke informasjonskanaler bruker du til daglig i jobbsammenheng?
- Kort beskrivelse av hvordan man bruker Internett:
 - Hvilke sosiale medier bruker du?
 - Beskrive kort forskjellen på privat- og jobbruk?
 - Er du aktiv på jobbrelatert sosiale medier? Hvilke? Hvorfor disse?
 - Når begynte du eventuelt å bruke den/disse?
 - Hvordan vil du beskrive deg? «Tung»/«lett» bruker?

3. Beskrivelse av intranettbruk

- Kort beskrivelse av generell bruk av intranett på din arbeidsplass?
 - Bruker du Intranett?
 - Hvor ofte? Hvordan? Har du intranettet som startside?
 - Hva brukes det til?
 - Hva er din motivasjon for å bruke det?
 - Er det noen spesielle deler som brukes mer enn andre deler?
 - Hvis det ikke brukes, bruker du andre fora der du holder deg oppdatert?
 - Hva er nyttig med dem?

4. Bruk av Jubel

- Bruker du Jubel?
 - Hvordan vil beskrive din bruk?
 - Hvor ofte bruker du det?
 - Hva bruker du det mest til?
 - (Hvis relevant) Hva hindrer deg å bruke det?
 - Hva er nyttig/hva er unyttig? Beskrivelse av dette?
 - Er det noen spesielle deler du bruker mer enn andre?
 - Hva oppfatter du som relevant for deg?
 - Kan du beskrive et eksempel på hvordan du bruker det?
 - Evnt: Hvorfor bruker du ikke Jubel?

5. Engasjement

- Hvordan vil du beskrive din deltakelse på nett/sosiale medier generelt?
 - Er du aktiv/passiv?
 - Kommenterer du mye, liker etc?
 - Leser du og ser på bilder etc.?
 - Deltar du ikke? Hvorfor eventuelt det?

6. Deling

- Hvordan vil du beskrive deg som deler?
 - Deler du mye?
 - Hvorfor deler du?
 - Hva er din vanligste måte å dele på?
 - Når kan du dele?
 - Er det som ikke kan deles?
 - Hva er for eksempel nyttig å dele?
 - Skal man dele med alle, eller er det noen spesifikke du deler med?
 - Deler du for eksempel innen lukkede/åpne nettverk/nettforum?

7. Deling i og utenfor Jubel

- Hvordan vil du beskrive deg som deler i Jubel?
 - På hvilke arenaer i Jubel deler? Hvorfor akkurat disse arenaene?
 - Hvem deler du med?
 - Er du del av nettverk som deler? Hvordan fungerer dette?
 - Hvordan vil du beskrive delingen i Jubel for din del?
 - Deler du på areaner utenfor Jubel? På blogg? På Facebook?
 - Hvis du deler utenfor Jubel? Hvordan fungerer det og hvorfor bruker du dette?
 - Hvilken rolle tar du på deg i delingen på Jubel?



Fakultet for samfunnsvitenskap og teknologiledelse

Institutt for sosiologi og statsvitenskap

Forespørsel om å delta i intervju i forbindelse med PhD-studie

Dette er en forespørsel om å delta i forskningsstudie om bruk og læring av sosiale medier i skolen og kommunal og fylkeskommunal sektor. Studien inngår som del av forskningsprosjektet "*Bruk av sosiale medier for samskapning og tilpassing av systemutviklingsmetodikk innen offentlig sektor*", utført av Norges Teknisk-Naturvitenskaplige Universitet (NTNU). Prosjektet er forankret og har faglig ansvar ved Institutt for sosiologi og statsvitenskap. Studien inngår som del av min phd-studie. Prosjektperioden er fra 2011 til begynnelsen av 2015.

Jeg er stipendiat i sosiologi ved NTNU og skal undersøke hvordan ulike personer i skolen og kommunal og fylkeskommunal forvaltning bruker sosiale medier. I korte trekk er hovedtema hvordan ulike individer i samspill med andre mennesker deler og lærer av sin erfaringsdeling gjennom bruk av sosiale medier i sin arbeidspraksis. Min hovedinteresse ligger å kartlegge hva som er forskjeller og likheter i bruk og deling av kunnskap.

Utvalget for undersøkelsen består av lærere, lærerutdannere, elever og studenter, samt ansatte med ansvarsområde for skole. I tillegg vil også utvalget bestå av kommunalt og fylkeskommunalt ansatte i offentlig forvaltning som jobber med offentlig tjenesteproduksjon. Jeg ønsker hovedsakelig å intervju personer som er over 15 år. Totalt vil jeg intervju mellom 40 til 60 personer under prosjektperioden.

Under samtaler/intervjuene vil jeg benytte meg av temaguide/intervjuguide. Samtalene vil bli tatt opp på båndopptaker, som senere vil bli transkribert. Lydopptak vil fungere som supplement til notatene jeg gjør under intervju. Intervjuene blir tatt opp på bånd for å få konkret gjengivelse av data. Det vil ca. ta én time å gjennomføre intervjuet, men også kortere/lengre tid, avhengig av hvor mye tid du har og om vi får til et godt intervju. Når og hvor intervjuet vil skje, vil vi også bli enige om. Det er også aktuelt å gjøre observasjon. Når dette gjøres, vil det bli informert om.

Deltakelse er helt frivillig. Du kan når som helst trekke deg, uten å måtte begrunne det. Dersom du trekker deg vil alle innsamlede data utgå fra studien og bli makulert umiddelbart. Alle opplysningene du oppgir vil bli behandlet konfidensielt. Ingen enkeltpersoner vil kunne gjenkjennes i den ferdige avhandlingen og vitenskapelige publikasjoner. Opplysningene anonymiseres og opptakene slettes når avhandling planlegges levert i januar/februar 2015.

Dersom du har lyst å være med på intervjuet, er det fint om du skriver under på den vedlagte samtykkeerklæringen og sender den til meg.

Hvis du har spørsmål angående studien kan du kontakte meg på mobil 92 08 45 07. Jeg er også tilgjengelig på e-post: halvdan.haugsbakken@svt.ntnu.no. Har du ytterligere spørsmål, kan du også kontakte min veileder Professor i sosiologi, Arne Krokan, også ved Institutt for sosiologi og statsvitenskap, ved NTNU. Han kan kontaktes på e-post: arne@krokan.com, eller mobil: 91 89 71 73.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste A/S.

Med vennlig hilsen
Halvdan Haugsbakken

Samtykkeerklæring:

Jeg har mottatt informasjon om studien og ønsker å stille på intervju.

Signatur Telefonnummer