Radical change in learning and Identity problems:

The Introduction of MNoPs in a large Distributed Public Organization

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Abstract

In this paper, I discuss recent experiences of the implementation of what we label as Managed Networks of Practice (MNoPs). Using an in-practice perspective, I describe and discuss how initially positive identity as experienced employee, an `old- timer`, are sometimes reconstructed into negative identities during learning situated in the context of a designed and formally arranged Network of Practice (NoP). We describe the closure of a learning identity, where the experienced `old-timer` willing to share while conducting inspections and learn from experts, are not able to this situated in a managed Network of Practice context.

Key words: Managed Network of Practice, Identity and Power.

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1.0 INTRODUCTION

Organizations today are urged to become learning organizations. "Speaking of identity" implies that they encourage their members to become students on behalf of their organizations, not only in relation to their work but also in relation to the communities they participate in. For the organization, this can be a radical innovation and for the employees this can be a radical change, that can imply a new identity, i.e. to become a learner on behalf of the organization and not mainly a "doer".

Problems occur which might give us an insight into what is at stake here. In this article, innovation in learning refers to the set-up of a formal network, within the organization labelled a competence network, to ensure knowledge sharing and organizational learning. This implies that the participants in the networks which they are assigned to, are there not only for themselves or as a group, but on behalf of the whole organization. Activities representing this purpose are tasks given to the competence networks in the form of hearings regarding organizational policy, which participants are supposed to discuss and give feedback on. The networks in the study are set-up by the organization, the participants are assigned and given resources (time) and responsibilities. In this light, I have chosen to label the networks in the study Managed Networks of Practice (MNoP). My concept is the network version, as Networks of Practice (NoP) (Brown and Duguid, 2001) are in relation to Communities of Practice (CoP), of what has been named managed communities, which describes the phenomenon of when organizations try to support or develop communities for learning. MNoPs have earlier appeared as a verb: managing networks of practice (see Agterberg et al., 2010). While previous research has mainly focused on how organizational changes reconstruct work identities (Beyer & Hanna, 2002; Cheng et al., 2008) or professional identities (Eriksson-Zetterquist et al., 2009), we will address how change initially influences positive identities for learning. Our research question is: Why do positive work identities for learning initially resist learning in MNoPs? We relate this question to power issues and what that is on stake in learning in MNoP's.

The central problem investigated in this study is why initially positive work identities for learning, identities like experienced employees or professional employees, sometimes create problems in designed organizational learning processes. This is interesting since research on NoPs and CoPs (Brown & Duguid, 2000; Lave & Wenger, 1991; Wenger, 1998), suggests that different forms of positive identity construction might be related to the cultivation of, and access to, knowledge resources.

2.0 PERSPECTIVES IN CURRENT RESEARCH ADRESSING THE RELATIONSHIP BETWEEN IDENTITY AND POWER IN LEARNING

Recent theorizing on identity stresses the ongoing identity work taking place in organizations, where individuals interpret their self in relation to a multiplicity of social identities (Watson, 2008). Identity has been studied from different perspectives, I present two of them, identity and power in research on CoP and more critical perspectives on identity. A CoP is defined as "a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping" (Lave & Wenger, 1991: 98). This area started off as being very promising regarding power issues when Lave and Wenger argued that: "unequal relations of power must be included more systematically in our analysis. Hegemony over resources for learning and alienation from full participation are inherent in the shaping of the legitimacy and peripheral participation" (1991: 42). While Lave and Wenger (1991) stress that peripheral *participation* is a positive term, describing people having access to activities they develop resources (power) from, Wenger (1998) introduces the concept of marginality in contrast to peripheral participation. He describes marginality as when participation in a practice is restricted, you become an outsider, with less resources (access to activities) to defend your interests. Marginality creates totally different identities than peripheral participation. The latter gives you the option to become an insider.

Current research on CoP is criticized for having a bias towards coherence and harmony and downplaying power issues (Gherardi, 2009; Mørk et al., 2010;). Several authors have tried to fill the expressed gap in practice-based theorizing, like Contu and Willmott (2003) arguing that "Old-timers" and "Newcomers" might have conflicting stakes when it comes to access and control. Meanwhile, Carlile () describes constrains on "newcomers" when they threaten important knowledge and practices the community have invested in (Carlile, 2004); Yanow (2004) theorizes on the double peripheral role of the street-level bureaucrat in relation to hierarchical knowledge (management) and local knowledge (costumers); Marshall & Rollins (2004) view power itself as knowledge in learning in organizations; Machperson & Clarke (2009) describe lack of learning and heterogeneous practices; and Mørk et al (2010) study negotiation processes related to medical innovation. The introduction of power (related to conflicts of interest) in practice-based theorizing have redefined our perspective on identity construction from leading to full participation for the individual in a community, towards a more multifaceted view where people and their knowledge and practices are sometimes not accepted, threaten others, and participation is restricted in organizations and communities. This research I label the "emerging perspective of conflicting identities of practice". Instead of becoming a student on behalf of the organization, the interpretation of yourself and construction of social identities are shaped by negotiations, rejection, denied access, non-participation and when being ignored regarding your (or your groups) suggestions, knowledge and practices.

The second perspective, is the critical perspective on organizations. The perspective stresses that identity work involves, in addition to work-related processes (as described also in the CoP literature), a negotiation of self in a context of the organizations' efforts of identity-regulation and control, efforts like recruitment and promotion and efforts by management which the employee might internalize or resist (Alvesson & Willmott, 2002; Handley et al., 2006; Watson, 2008). From a managerial regulation and control

perspective, identity is a source for reducing fragmentation in feelings regarding experience and following less fragmentation in the organization and its learning. The critical perspective adds to the current power perspective in the study of CoPs, its emphasis is on the role of management regulation and control on identity construction on one hand, and the employee resistance to these efforts on the other. This is relevant for our understanding of how individuals and groups may construct or reconstruct their self and their learning identities, for instance when being denied access or being ignored in learning processes in the organization.

The analytical perspective also helps us to see active actors in a terrain of structures (hierarchies and communities), by giving the actors an active interpretative role able to criticize and question "the truth" and develop counter-discourses questioning "the truth" on who they are and following what they are supposed to do, think and feel (Watson, 1994; Alvesson & Willmott, 2002). Identity work, in this perspective, can be resistance towards management or communities of practitioners or professions imposing an identity on you. See Table 1 for an overview of the two perspectives.

	СоР	Critical perspective
Core concepts addressing linkages between identity and power	Identity work as legitimate peripheral participation (Lave and Wenger, 1991) Marginality (Wenger, 1998)	Identity work as resistance (Alvesson & Willmott, 2002; Watson, 2008)
Power defined as	Access to activities, which creates resources (Lave and Wenger, 1991)	Interpretative and inventive abilities (Alvesson & Willmott, 2002)
Role of discourses for the employee	Learn to talk about practice (stories), moves towards full participation in a community (Lave and Wenger, 1991)	Creation of alternative identities (Alvesson & Willmott, 2002)

Table 1 Perspectives on identity and power

The perspectives describe different identity trajectories in work and organizational life. The first describing individuals moving up or into CoPs by accepting the rules of the game – rules as a part of the activities they take part in as true participation. The second perspective describing individuals resisting through the construction of alternative identities.

2.1 Towards a perspective of investments in identities and learning

In this section I emphasize the role of investments in identity work. Whether considering learning or identity, the shift from an epistemology of possession to one of practice (Cook and Brown, 1999) has implications for understanding learning in

relation to identity work. Treating knowledge as a possession, we leave out the dynamic, relational and processual character of learning (Newell et al, 2009). It will also, as I suggest here, leave out a deeper understanding of what is at stake in learning, since knowledge is reduced to something you can posses and apply, without any hesitation, if others just share it to you.

A practice based view, helps us to see knowledge and identity as situated and always in the making (Newell et al, 2009). A perspective of investments of learning within a practice based approach, gives sensitivity for both historically constituted and emergent elements in our analysis of the relationship between learning and identity in learning. Knowledge is what you have done, are doing and ar: e supposed to do in the future, as you perceive yourself. When you do identity work, you invest in your identity – your self esteem , your relations to others, the ways of seeing the world and the work practices you have developed in relation to this identity. Learning in view might put your earlier investments on stake and are not just a matter of "receiving a new package of knowledge"; it might put your identity in stake. Learning might also imply that you must do new investments – doing a new identity might imply investments in new relations, new practices and emotions attached to old and new practices.

3.0 METHODOLOGY

3.1 Research setting

This study focuses on experiences of the implementation of managed Networks of Practice in the Norwegian Labor Inspection Authority (NLIA). The NLIA has been through a process of organizational change, from a hierarchical rule-based bureaucracy towards a more professional, knowledge-based bureaucracy (Mintzberg, 1983). The organization has also moved towards heterarchy, relying more on collaboration and cooperation, making it a more decentralized project and network based organization. However, there are still several unsolved problems. One can argue that the NLIA is a hybrid organization, consisting of the following coexisting elements: old user oriented logic, professional logic, control oriented logic and emerging professional and user oriented logic.

The NLIA is a distributed public organization. The inspectors in this organization have mixed backgrounds. Historically speaking, people with some years of experience were recruited from industries in the building and construction sectors. Others moved up from working as clerks to being an inspector, often after gaining qualifications from a college. More recently, people have entered the organization with a fuller and more extensive professional college degree or university degree (bachelors or masters). The two networks of physiological and social wellbeing there are no psychologists, but people with degrees in human geography and sociology, priests, former police constables, social workers and others. The two networks for the prevention of accidents are staffed by both engineers and social scientists. The most homogeneous network is the network for occupational hygiene, in which nearly all of the participants had some type of degree in engineering. All of the networks, as well as the inspectors, included one or two lawyers. This study therefore represents a context including multiple preexisting identities.

While the NLIA used to keep its experts at its central core, their expertise now has to be developed in the regions, among the disparate inspectors in the intra-organizational

networks set up by the management. These people are now intended to be experts as a collective. Attempts have been made to achieve this by setting up "competence networks" of inspectors. The name of the network has been debated; some argue that these networks are "knowledge networks" or "professional networks", stressing the development of professional knowledge in the networks. Others use the broader concept of a "competence network", emphasizing the mix of professional and experience-based knowledge which needs to be developed. The inspectors within each region are assigned to one of four different networks, usually based on their professional orientation or areas of interests.

In this context, the inspectors are often on the move as they perform their tasks. The distance between the different members can be as much as 1300 km, and, owing to their limited budget, they may only see each other face to face (FtF) twice a year for two days at a time. Knowledge sharing and learning are therefore supposed to take place through the use of ICT. The tool used in the network settings is the GoToMeeting tool, a highly rated (Lipschutz, 2007) web-based tool that allows everyone in a group meeting to share whatever is on their computer. The tool contains features which enable screen sharing, sharing of keyboard and mouse control, chat and telephone conversations, and the tool is also integrated with email and an Outlook calendar to allow meetings to be booked effectively (see http://www.gotomeeting.com). While they are able to share everything they have on their computers and engage in meetings over the telephone, the participants do not see each other.

3.2 Research methods and data analysis

Data collection took place over a two year period. This involved interviewing network members and managers in the organization, as well as observing physical and virtual meetings and documents (see Table 1 for an overview). All of the online meetings in the final year were observed, in two of the networks in this study. The researcher was logged on to the same meetings as the participants, with access to what was happening via the telephone and the computer screen. This also made it possible for the researcher to take snapshots of the screen sharing activities, by the use of the print screen function on the personal computer (PC). Sometimes, at the end of the meetings, when the meetings were being evaluated by the participants, the researcher asked questions regarding what had taken place

Interviews	18 individual interviews	
	One group interview of five people	
Observations	50 hours of observation of FtF and online	
	meetings, including snapshots of screen	
	sharing activities	
Archival	Agendas of meetings	
	Minutes of meetings	
	Official evaluations	

Table 1. Data collection methods

When analyzing the observational data, I was looking for practices and their relationships with identities, and categories subsequently emerged from our observation data. All of the interviews were recorded, transcribed and analyzed by the use of the Nvivo 8.0 tool. I approached this data from a grounded theory approach (Glaser and Strauss, 1967), first inductive coding, and later made connections to theory.

4.0 DATA PRESENTATION AND ANALYSIS

In our study we describe three practice taking place in the MN oP`s. The three practices are illustrated in the figure below:

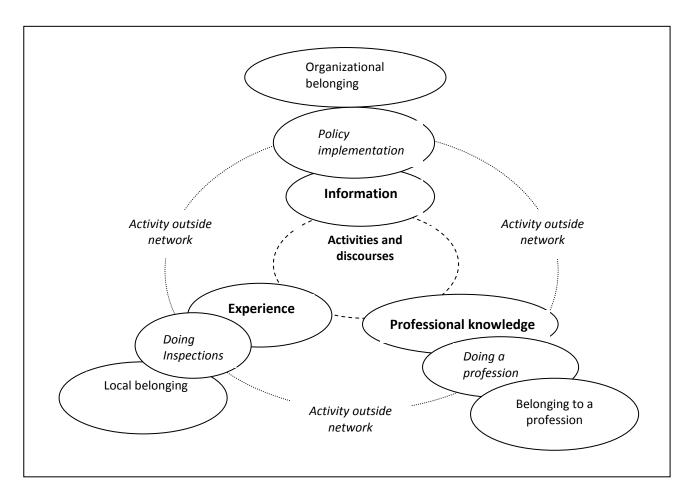


Figure 1: Three ideal types of learning practices within the managed Networks of Practice

The three practices represent activities in the MNoP's The networks mostly working with phenomena and knowledge close to natural science typically practice professional knowledge and experience. The networks working with psychosocial work environment phenomena and largely based on knowledge related to social science typically practice information and experience. One of the reasons for establishing the networks was that the expert center present in the earlier organizational model was closed done, and one seek to involve the whole organization in the learning and knowledge development through these networks. One hoped to facilitate for more collective and reflective learning and practice through these networks, to insure collective competencies.

4.1 Sharing of experience and local belonging

The exploitation of experience based knowledge is problematic, for two reasons. First of all, not every project is of interest to everybody; one subject, when evaluating one online meeting, said: "I dropped out: I am not working with that kind of project". In our view, this represents a distinction between the people who identify with a project and the others who feel that they are "outsiders", since they do not work with the same issues. This situation is also enhanced by the fact that some of the network members are working on the same project(s) and others are not. In addition, some participants reported that there are members who are "givers", who always have something to share with the others and therefore hardly ever receiving information, and there are "receivers", who then benefit from the network (see table 2).

This is also evident in project work. One meeting described a project where the inspectors had great difficulties to write up a collective report, since different contributions where written up differently. For people working from a small district office, the network is an important arena in which to raise issues, but due to the lack of meetings, the number listeners and the lack of social cues (telephone), it proved to be problematic to move forward as a group from the individuals' positions. The employees characterized as old-timers" prefer to work (f2f) in pairs and learn from each other when working, i.e. action and learning are highly overlapping in regard to time and context. In one meeting a former district manager, now and adviser, formulated on a emerging problem:

"It think we have attracted new employees to believe that they should be able to immerse themselves in their field. Companies have now begun to complain, the inspectors are academically strong, but they are difficult to communicate with" (Notes from a regional meeting)

For the experienced old- timers", inspections has to be adjusted to local circumstances and experts were only a phone call away (at the organizations headquarter several hundred kilometers away). This is regarded as problematic in the MNoP context.:

"I think the old boys probably do not think that the network is the right venue for learning ... they just give and do not get anything from it.. they think like that ... they come from another time ... miss a key expert to deal with. They are used to a much stronger personal relationship with the expert. I can understand that they do not have the same trust to a network. "(Young Inspector)

The old timers in this organizations are historically used to be share knowledge with others in small groups and receive expert knowledge from the core of the organizations. The networks have given them sense of being givers and never receivers. Giving old timers `extra burdens in this arena, they give but do not get anything out of it.

4.2 Sharing of information and organizational belonging

The second practice we have identified are the sharing of information regarding policies – interpretations , changes and roomers` about what is going on in the organization. And initially lots of discussion about the purpose of the networks. In particular newcomers regards these activities as useful (or at least potential useful) as an arena for formal clarifications.

"Since I have no manager at my office, I have to ask these questions (regarding policy) here. (Young inspector)

But Several of my informants regards the meetings to overloaded with information "from the top" and useful learning activities.

"I find that it is a demanding exercise to establish a vibrant network. I think that there are many things that come into play here, not least the group's mandate and legitimacy. A group established through compulsory group formation requires clear objectives for its function. For our part is probably the lack of clear targets a significant challenge" (e-mail from an coordinator)

While` newcomers` find it useful, `old-timers` are less enthusiastic, resulting in a situation of lack of engagement and now show at meetings.

4.3 Sharing of professional knowledge and professional belonging

The third practice, see table 2, the exploration of professional knowledge, involved problems relating to the differences in terms of professional identification among the network members, illustrated here by this quotation:

"This is supposed to be an arena for creativity, but many are not active... You can use the very strong expression; "there are a lot of dead men in the load"...it should maybe not be used, but...it is not anything wrong with the person... people are assigned, at least partly, to the network and their competences do not always fit in with their participation in the network. When we have this large number of people involved, some are more active than others, but also I think it has to do with their interest in belonging professionally; that is the most important thing that can move the network forward" (Senior inspector).

Similar findings were revealed in the results of our interviews; (the number of times the following categories were mentioned is shown in parenthesis): "the main challenge is professional knowledge" (7), "interdisciplinarity creates problems for the group development processes" (4), and "creative ideas are fused by professional interest" (1). This indicates that some network members are interested in the development of professional knowledge, while others are not. An overview of the findings are presented in table 2 below.

Practice	Interpretative context	Content	Identities constructed	Identities on stake
Exploiting experience based knowledge	Out ward oriented towards clients	About experience	"Giver" and "receiver" identities	" Being equally knowledgeable"
Exploiting information about the organization	In ward oriented	Inward oriented, about organization	Individual "self managing" identities (resistance) and organizational "followers".	"Out ward oriented Inspector Identity"
Exploration of professional knowledge	Outward oriented towards external expertise	Academic theories, concepts and models	Professional identity and non professionals	"Out ward oriented Inspector Identity"

Table 2: Practices, context and identities on stake.

5. 0 DISCUSSION

From a perspective of Communities of Practice, learning is a holistic process (Wenger, 1998) and a MNoP are, at best, only one arena where learning and identity are developed and formed. Our findings suggest that the `old timers` in this organization are outward oriented, towards learning in the field. To them knowledge or knowing is about communication with the expected businesses. This knowing and the identity as an outward oriented inspector is at stake when they are supposed to become learners on behalf of their organization, where internal policies and academic topics are discussed. There are several plausible reasons for "old timers" not participating like personnel attitudes, fear to disclose lack of sufficient knowledge, no motivation, lack of time or don't see the benefits. But in my view the "old-timer" identity (ies) are made up important characteristics' like outward orientated focus, individual freedom in task handling and inspections as the main learning arena. Which makes it not hard to understand that "old –timers" resist participating in the MNoP`s .

Being an experienced or professionally are positive identities enacted by the participants in the MNoP's, but other social categories and identities emerged in the context of MNoPs aswell; such as a doer identity versa learner, givers versa receivers, project members versa non project members and conflicting professional, rule based and experience based identities. These identities represent and contribute to the ongoing

imbalance in the field of knowledge, which may, for some people, prevent positive identities for learning from being enacted. As a result of this imbalance, some participants in the networks are no longer able to mobilize their interests or passion for the network, meaning that they contribute to and gain less from its existence. We can describe it as a closure of a learning identity, where the experienced `old-timer` willing to share while conducting inspections and learn from experts, are not able to this situated in the Managed Network of Practice (MNoP) context. Since what they hear, sometimes, do not fit their view and the view of others are not always regarded as legitimate by the individual. Related to this problem is also the fact that they are a large heterogeneous group and in an online environment with fewer social cues. This indicates that one goal for the networks are not achieved, namely to transfer experience from `old-timers` to the `newcomers` in the organization. On the other hand, networks who have nurtured the professional identity, but kept discussions loosely and linked to the conducting of inspections, similar to how they help each other while doing joint inspection, seem to develop their engagement and learning practices further. To them a managed and online environment is not a big problem, while developing community and learning. When newcomers in the MNoP's setting seek advice on «how to conduct the Inspections correctly», their more experienced peers are not able or willing to share this information and the conversation are redirected towards either the manager present in the discussion or labeled as «something needed to be clarified» in the organization. These discussions doesn't give meaning to the 'old timers', because it is a matter of communication skills which you acquire conducting inspections. I can describe it as a closure of a learning identity, where the experienced "old-timer willing" to share while conducting inspections and learn from experts, are not able to this situated in the MNoP context. Since what they hear, sometimes, do not fit their view and the view of others are not always regarded as legitimate by the individual. To me it seems that both newcomers engaged in professional and organizational activities in the MNoP context, threaten important knowledge and practices the community have invested similar to what Carlile (2004) has described.

When the participants construct identities like giver – receiver, and professional versa non- professional they point out that some really are more and other less legitimate or worthy participants in the competence networks. The consequence of the divide between the legitimate and the un- worthy are reduced willingness to share and learn, findings in line with Thompsons (2005) findings in a web design company. Related to this problem is also the fact that they are a large heterogeneous group and in an online environment with fewer social cues. The construction of the self managing identity – have historical rotes related to distributed activities, but represent also resistance (Alvesson & Willmott, 2002; Watson, 2008) against central control.

6.0 CONCLUDING REMARKS

In this paper we set out to investigate learning processes in the form of practices in MNoP's, in a geographically distributed organizations where people often work alone or as pairs when being 'in-action'. Initially we asked the question: When and why do work identities which are initially positive become negative in MNoPs? Our findings suggest that MNoP's create and problematic relationship between 'old-timers' and 'newcomers', were the newcomers regards the 'old – timers' as experienced, but the MNoP context offers a situation where 'old timers' are not willing to share and do not acknowledge expertise within the network. Two problematic areas are differences regarding experience or academic orientation, and inward or outward orientation. The

later an area which the `old-timers` have invested their knowledge (in particular communication skills), identity and prestige in.

The theoretical contribution of this paper is what I have described as the closure of a learning identity – focusing on the "old-timer", a situation consisting of the following elements; 1) lack of the legitimate expertise within the network, 2) issues raised that seems irrelevant and unproductive for "old-timers" (issues raised by managers and newcomers), and 3) a experience of always giving and never receiving. Giving a the `old-timer`and `street level Inspectors` a double marginal role in the professional and organizational activities for learning. The managerial implication of this study is that attempts to access the knowledge and knowing of `old- timers` must take into account the outward orientation of distributed bureaucrats, as the inspectors are, when setting up arenas for organizational learning.

References

Agterberg, M., Van den Hooff, B., Huysman, M. & Soekijad, M. (2010), `Keeping the wheels turning: The dynamics of managing networks of practice.' *Journal of Management Studies*, 47 (1, January), 85-108.

Alvesson, M. and Willmott, H. (2002), 'Identity Regulation as Organizational Control: Producing the Appropriate Individual', *Journal of Management Studies* 39(5): 619–44.

Beyer, J.M, & Hannah, D.R. (2002) Building on the past: Enacting established personal identities in a new work setting. Organization Science, 13: 636-652

Brown, J.S og Duguid, P., (1991): "Organizational Learning and Communities of Practice: Toward a Unified View of Working, Learning, and Innovation. Knowledge and Communities" 2(1), 40-57.

Brown, J.S. and Duguid, (2000), The Social Life of Information. Harvard Business School Press.

Carlile, P. R. (2004), 'Transferring, translating and transforming: An integrative framework for managing knowledge across boundaries', *Organization Science*, vol. 15 no. 5, pp. 558–568.

Cheng, C., Sanches-Burks, J., & Lee, F. (2008), Connecting the dots within: Creative performance and identity integration. Psychological Science, 19: 1178-1184.

Contu, A. and Wilmott H. (2003), 'Re-embedding situateness, the importance of power relations in learning', Organization Science, vol. 14 no. 3, pp. 283-296.

Cook, S. N., and Brown, J. S. (1999), 'Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing', Organization Science, vol. 10 no. 4, pp. 381-400.

Dutton, J.E., Roberts, L.M & Bednar, J.,(2010), Pathways for positive identity construction at work: Four types of positive identity and the building of social resources. *Academy of Management Review*. Vol 35, No. 2, 265-293.

Eriksson-Zetterquist, U., Lindberg, K & Styhre, A (2009), When the good times are over: Professionals encountering new technology *.Human Relations, August 2009; vol.* 62, 8: pp. 1145-1170.

Giddens, A. (1991), *Modernity and self-identity: self and society in the late modern age*. CA: Stanford University Press.

Glaser, B. & Strauss, A. (1967), Discovery of Grounded Theory. *Strategies for Qualitative Research*, Sociology Press.

Hislop, D (2009). Knowledge management in organizations. Oxford: Oxford University Press.

Hogg, M.J, & Terry, J. (2000, Social identity and self categorization processes in organizational contexts. Academy of Management Review, 25: 121-140

Lave, J. & Wenger, E. (1991), *Situated Learning: Legitimate Peripheral Participation*. Cambridge, Cambridge University Press.

Lipschutz, R.P. (2007), GoToMeeting 3.0 review. Retrieved 13. September 2010 from http://www.pcmag.com/article2/0,2817,2154128,00.asp

Marshall, N. and Rollinson, J. (2004), 'Maybe Bacon Had a Point: The Politics of Interpretation in Collective Sensemaking', *British Journal of Management*, vol. 15 no. S1, pp. 71-86.

Macpherson, B. & Clark, A. (2009), Islands of practice: Conflict and a lack of 'community' in situated learning. *Management Learning*, 40 (5), 551-568.

Mintzberg, H (1983), *Structure in fives: Designing effective organizations*. Engelwood Cliffs, N.J

Mørk, B.E: Hoholm, T; Ellingsen, G; Edwin; B; & Aanestad; M (2011), Challenging expertise: On power relations within and across communities of practice in medical innovation *Management Learning August 2, 2010*

Newell, S., Robertson, M., Scarbrough, H., Swan, J. (2009), *Managing Knowledge Work and Innovation*. Palgrave Macmillian.

Orlikowski, W.J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, *11* (4), 404–428.

Orlikowski, W.J. (2002). Knowing in practice: Enacting a collective capability in distributed organizing. *Organization Science*, *13* (3), 249-273.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S.Lincoln (Eds.), *Handbook of qualitative research*. London: Sage.

Thompson, M. (2005). Structural and epistemic parameters in communities of practice. *Organization Science*, *16* (2), 151-164.

Watson, T.J, (2008), Managing identity: Identity Work, Personal Predicaments and Structural Circumstances. Organization; 15:29

Wenger, E. (1998), Communities of Practice. Learning, Meaning and Identity, Cambridge University Press, New York.

Yanow, D. (2004), 'Translating Local Knowledge at Organizational Peripheries', British Journal of Management, vol. 15 no. S1, pp. 9-25.