

LEARNING AS PARTICIPATION

by

Cathrine Filstad
Associate Professor (Ph.d.)
Norwegian School of Management
Institute for Leadership and Organisational Management
Nydalsveien 37, 0484 Oslo, Norway
Mobile +47 46410715
E-mail: cathrine.filstad@bi.no

Abstract

This paper provides an empirical contribution to learning as participation for newly educated. The unit of analysis is learning as situated in social practices, discussing how and what newcomers learn through participation. They recognize the importance of getting access to apply educational knowledge as knowing in professional work. How they learn is mostly through observations of colleagues, where they would prefer to get more access to colleagues and be able to practice together with them. They learn to apply knowledge as knowing on how to perform, in learning as participation, characterized by observations, conversations and through practice, which needs to be highlighted as superior.

Introduction

Mostly, literature on organizational learning has its interpretation from individual oriented psychology (Cyert and March, 1963, Huber, G.P., 1991 and Pedler et al., 1989) and in accordance to a metaphor of learning as individual acquisition of knowledge, skills and attitudes (Sfard, 1998). Thus, learning is separated from context (Gherardi et al., 1998), and therefore misleadingly understood as finding and acquiring items of organizational knowledge (Gherardi, 2006). This approach to organizational learning has its roots within educational learning and cognitive psychology, whereas new knowledge is learned through individual acquisition of information and knowledge. The unit of analysis is the individual as the dominated perspective of organizational learning theories, as information processing of new knowledge stored in the individuals head and mental processes for future use. However, individual level psychological theories cannot be applied to organizations because they do not adequately describe organizational learning processes because the assumption underlying these theories does not hold for organizations (Weick, 2001). Organizations are a different type of entity than individuals and interact with environment differently than individuals. Learning in organizations is therefore far more complex, and must be viewed as an integral part of participation in everyday life at work (Nicolini et. al, 2003), and not to be reduced to the individuals acquisition of knowledge followed as guidance of how to perform organizationally (Elkjaer, 2002). Learning can more fruitfully be understood as a participation metaphor, because it involves being, belonging and becoming part of social practices (Sfard, 1998). The idea of the organization as the learning unit, as the learning organization (Senge 1990, Argyris and Scön 1978, Pedler et al., 1989), and the individual and the organization as separate, where the individual act on behalf of the organization is not clear in the learning organization literature (Elkjaer, 2002). It applies an acquisition metaphor and fails to explain how to transfer individual knowledge to the organization. It also fail to explain the importance of social relation between the individual and organization, including colleagues but also customers and others involved in the organizations everyday life, which is the unit of analysis within a participation metaphor.

Contributions within a participation metaphor focuses on learning as situated in social practices, recognizing learning in social and cultural working environment. Lave and Wenger's (1991) give important contributions to a social and cultural approach to learning emphasising the importance of social practices. In later contributions, both Lave (1999, 2000, 2002, 2003) and Wenger (1998, 2000, 2002, 2003) understand learning as participation in communities of practice, including both the epistemological and ontological dimension. The unit of analysis is the social practice where learning is part of ongoing, continuing processes of everyday practice at work. They (Lave and Wenger, 1991) recognize a limited focus on ontology within an individual cognitive approach to learning, as to how to be part of the world and practice. They argue for learning to include both an epistemological and ontological dimension, outlining learning as a question of being and becoming part of social practices. Thus, learning is relational.

Still, further development of learning as participation is needed, and as argued by Elkjaer (2003), Lave and Wenger still ignore how the epistemological and ontological dimension bind. She claims (2004) it to disappear within the broader concept of learning as participation. The need for increased understanding of how learning occurs through participation and what is learned is necessary and for instance Boud and

Middleton (2003) have problems with finding communities of practice at work in accordance to Wenger's description of them. They explain:

“While the idea of communities of practice provides useful ways of accounting for the phenomenon we are considering (learning informally from others at work), it also has limitations and is not sufficient for our purposes of dealing with informal learning at work. We can clearly discern a variety of networks through which learning take place. Some of these meet some of Wenger's (1998) indicators, however, some of the relationships reported to us reflect more loosely coupled groupings than those described by him”(p.200)

When focusing on learning as participation the unit of analysis is social interactions between members in social practices. Mostly these learning processes are characterized as informal learning. Informal learning highlights the importance of everyday practice at work and that informal learning mostly occurs through social relations with colleagues as the superior form of learning (Eraut, 2000, Larsen and Svabo, 2002, Garrick, 1998, Collin, 2002, Beckett and Hager, 2002). What is learned in informal relations is therefore central to our understanding of what is learned through participation in social practices at work.

The knowledge of how to practice as a question of knowing, and what is learned through practice, is the focus of attention when Chiva and Alegre (2005) recognize learning and knowing as ongoing, continuing processes of practice and as two sides of the same coin, involving both tacit and explicit knowledge. In their view it will be difficult to differ between learning and knowing, and for what purpose? Learning and knowing is integrated in everyday practice at work, where Lave reject a distinction that she claims to be assumed between knowledge and learning and where Wenger talks of knowing in action as joint enterprise and belonging, and as situated in the system of ongoing practices in ways that are relational, mediated by artefacts, and rooted in a context of interaction (Nicolini, Gherardi and Yanow, 2003). Consequently, it is argued that both learning and knowing must be treated as inseparable processes, involving both the epistemological and ontological dimension, as learning to know about and knowing through participation (Schneider, 2007).

This paper provides an empirical contribution to learning as participation at work, focusing on newly educated master and bachelor students and their learning processes in order to become professionally knowledgeable. The aim is to discuss both how newcomers learn through participation and what is learned in these processes of learning and knowing. I apply a social and cultural approach to learning as participation and discuss whether this perspective and approach to learning and knowing as ongoing, intertwined and therefore quite inseparable processes, can give fruitful contributions to newcomers learning as practice. The purpose of this paper is also to explore how getting access to colleagues can result in the newcomers' ability to practice together with colleagues in learning. Thereby, the paper contributes to the recognition of informal learning when exploring what is learned (as knowing) and how it is learned (as a question of informally getting access to colleagues through practice) as the focus of attention.

Learning as participation – knowledge as a question of knowing

Can the concept of knowledge, which is interdisciplinary in nature, find its relevance as a question of knowing? Or in other words, is there a chance to integrate the knowledge concept in our search for understanding knowing and learning as inseparable ongoing

processes at work? Schneider (2007) argues that knowledge and knowing must be kept in mind simultaneously. For instance, newcomers struggle with their ability to apply educational and previous knowledge in professional organizations. Is their educational knowledge of interest when not applied as a question of knowing? Engeström (2007) argues for the usefulness of looking at knowledge from the point of view of its uses. Again, the need for bringing the concept of knowledge into where it is applied is put forward. Can knowledge as a question of knowing overcome its conceptual state of confusion and lead us towards an understanding of the nature of knowledge, learning and knowing?

Both the learning and knowledge concept face various problems when it comes to their theoretical confusion and diversity (Chiva and Alegre, 2005). Knowledge is treated within a resource-based view extended by looking at routines and capabilities as the level of abstraction. Consequently, it avoids the ontological and epistemological dimensions (Schneider, 2007). This avoidance is recognized in traditional definitions of knowledge as “justified true beliefs” (Nonaka and Nishiguchi, 2001), then, knowledge is treated as a form of high value-added information that can be taken out of context, recorded, classified and distributed (Davenport and Prusak, 1998:43). Instead, knowledge is viewed as context-free and static (Schneider, 2007). Due to a lack of clear definition of knowledge, but rather a multitude of unclear, all-inclusive definitions, it also draws on other unclear and all-inclusive concepts such as learning, experience and capabilities. When defining “*knowledge as justifies true beliefs that can be both explicit and tacit*” (Von Krogh, Ichijo and Nonaka, 2000: 6), knowledge is conceptualized as an object instead of a process. At the same time it provides a broad definition, including that knowledge is all abilities and skills applied by individuals to fulfil purposes on how to act, to ascribe meaning, including normative and emotional elements and depending on context and time. The above examples of defining knowledge, its simplification, all-inclusive, and somewhat fuzzy use of the concept of knowledge, are recognized. It also unfolds a traditional cognitive approach to knowledge and learning. Thus, social contexts and situated practice are considered as frames that need to be taken into consideration, as knowledge about (epistemology) the situation, not knowing as belonging and being part of social practices and situations (ontology).

Within a social and cultural approach to knowing and learning, a claim for the need to develop a new vocabulary that includes knowing as an integrated part of learning as participation (Nicolini, Gherardi and Yanow, 2003) has obtained growing attention. It is believed that knowledge as a question of knowing that enables and enriches our understanding of the concept. Lave (1988, 1997, 1999) focuses on knowing rather than knowledge and avoids the distinction that is conventionally assumed between knowledge and learning. Wenger (1998, 2003) emphasizes knowing in practice as joint enterprise and belonging. Nicolini, Gherardi and Yanow (2003) address knowing and learning from a practice-based perspective, recognizing organizational knowing as situated in the system of ongoing practices of action in ways that are relational, mediated by artefacts, and rooted in a context of interaction. Knowing is dynamic and provisional and continually reproduced and negotiated in social participation (Nicolini, Gherardi and Yanow, 2003). It is not simply a matter of taking in knowledge. It is an act of construction and creation where knowledge is neither universal nor abstract but depends on context (Chiva and Alegre, 2005). Knowledge in organizations is not available through standardized answers, routines and explicit manuals, or justified true beliefs, not even as subjective truth. Knowledge is continually developing in ongoing processes of learning and knowing. Professional life is not readily defined and knowledge is not static, but continually developing, as situated and mediated in social

practices. Thus, being knowledgeable is about being able to frame situations and identify solutions and act accordingly. It is about being able to balance codified knowledge (explicit knowledge) and tacit knowledge (knowing what and knowing how) (Eraut, 2000), but as a question of knowing, with no clear distinction or even awareness of what is tacit and what is explicit knowledge in the process. A social and cultural approach to learning represents an approach to learning and knowledge as participation in practice, where knowledge is a question of knowing situated in social practices. The unit of analysis for both learning and knowing is therefore participation in social practices. As stated by Catania (1998: 227): “*It is one thing to learn about other people, but another thing to learn something from them*”. Knowledge is a process that generates knowledge “situated” in social practices, and knowledge and learning are not individual and mental processes, but must be conceived as social and cultural phenomena (Brown and Duguid 2001; Lave and Wenger 1991; Blackler 2004; Tsoukas 2005; Gherardi and Nicolini, 2000), something people do together and not to be reduced to processes taking place in individuals heads.

To understand knowledge, the notion of practice and the individual as social participants in applying knowledge as a question of knowing is crucial. Blackler (2004) recognizes the need for going beyond embrained knowledge (individual and explicit, through embodied knowledge (individual and tacit), encoded knowledge (collective and explicit), embodied knowledge (collective and tacit) and ending up with encultured knowledge as shared understanding that is socially constructed, which he believes is beginning to assume predominant importance. In encultured knowledge, tacit and explicit knowledge is moreover integrated in social constructions of knowing. I believe that by distinguishing between tacit and explicit knowledge, for analytic purposes, we can obtain understanding of their different characteristics and their consequences for knowledge and learning. However, conceptualization of knowledge as tacit and explicit tends to focus on how to make tacit knowledge explicit (for instance Nonaka and Takeuchi (1995) in their knowledge spiral for knowledge creation in organizations), and is seldom fruitful (Strati, 2007). It simplifies the characteristics of tacit knowledge and contributes with a misunderstanding of knowledge being either tacit or explicit. In practice, the distinctions between the two forms of knowledge will often be inseparable, and need to be treated as total knowing on how to practice. Dealing with the concept of learning and knowing means dealing with philosophical issues on how we conceive of reality, insight, language and actions. Neither is to be reduced to concrete explicit actions as knowledge maps, e-documents and yellow pages (Schneider, 2007), nor reduced to only dealing with the tacitness of knowledge. It needs to involve both issues of ontology as well as epistemology, recognizing the complexity of learning and knowing. Or in other words, we need to rethink the concept of knowledge as a question of knowing in social practices and we need to consider learning and knowing as mostly inseparable ongoing processes in solving everyday tasks at work. That is my approach to newcomers learning processes focusing on the newcomers learning as participation as the unit of analysis.

Methods.

The past year, several in-depth interviews and focus groups with newcomers in different organizations has been conducted. The sample consisted of newly graduated master of science students, with a total of around 30 interviews and group meetings. Some of the findings from the interviews lead to a number of propositions that was tested through a survey using a 5-point likert scale with 539 responses (33,4% response rate). The survey was distributed via e-mail to students graduating from bachelor and master studies in

Norway in 2005 and 2006. There were 54,5 % male and 45,5 % female who responded. 90% of the respondents were between 22 and 30 years old. The respondents were mainly employed in positions at consultant level in different organizations. After the survey, we followed up with new interviews of around 20. The data material consists of a combination of propositions that provides us with general patterns on the characteristics of newcomers learning processes and in-dept explanations on several newcomers own experiences. In this paper I present a combination of general finding from the survey with a general pattern and more detailed explanations from the interviews. The discussion is divided into three headlines in accordance to the purpose of this paper; how newcomers learn through participation and what is learned through participation; 1.The characteristics of informal learning in learning as participation. 2. Getting access to colleagues as a question of learning in participation and 3. Approaching learning and knowing within a social and cultural approach to increase our understanding of newcomers learning as participation.

Results and Discussions

The characteristics of informal learning in learning as participation.

Newcomers find that educational knowledge is quite limited, and that it is necessary to obtain new knowledge in order to perform well and succeed. Consequently, they report the need to learn from colleagues. When differentiating between the levels of knowledge established colleagues represent, 92% claim to learn from colleagues in higher positions, 80% from colleagues at an equal level and 60% claim to learn from colleagues on a lower level. This is in line with their statement of trying to learn from several colleagues, as they see that different colleagues represent different levels of knowledge. As several of them explain:

“I learn by looking and imitating. But is mostly on my own initiative and that I observe and do what they do”.

“It is ten times more effective to talk to colleagues than to call them or use the internet. Then you must hold a conversation, in social interaction, you hear and it is easier to obtain knowledge in that way....Suddenly, it is a case, and suddenly you talk with them, in a language I did not know that I had. In a way obtained through everyone I have been talking to”.

“As newcomer, it is a lot you do not know, how to perform in meetings with some people, but differently with other people. It is the informal, you have learned because you have observed, but it takes time. You have to be psychological in order to see patterns on individual behaviour... You need to learn the “codes”, and you need representative of these codes”.

“I have been good at throwing myself into different situations to be able to observe and learn. I have done that a lot, go in and observe how they perform in interviews. Then I have done my own interviews, and when being in doubt, I have asked them to finish my interview. So I have used my colleagues actively when I have been uncertain. So when I have done that once, having had colleagues together with me in different situations, I feel very secure in my next performance. Recognizing being in a similar situation that I previously have considered together with colleagues”.

Newcomers report informal learning arenas with colleagues as most important. These informal learning processes provide them with an opportunity to discuss work, observe and practice together with colleagues. However, they also find formal learning arenas important. They are also in an early stage of their professional carrier, and are not that

conscious of informal learning arenas. Even so, they find social relation and the opportunity to practice together with colleagues in learning as most important in order to obtain necessary knowledge. Then they report that they are able to apply knowledge in practical working situations. Their informal learning is a result of everyday practice, linked to the learning of others, and mostly integrated in daily routines. And moreover, it is often a result of own initiative that they are able to observe colleagues in learning, but mostly they also to be able to practice together with them to a larger extent. Learning as participation in social practices and be able to practice themselves in these learning processes is highly recognized as important to obtain and use necessary knowledge to perform successfully. As one of them explains:

“I learn all the time how to handle different types of people. That is what work is all about, and others cannot tell me that when you meet that kind of person you have to act like this and that. You can only learn that through practice. That is difficult because it is a kind of tacit knowledge that you only can obtain yourself by talking to a lot of people. It is impossible to be concrete, you just feel that you need to talk in a certain way now. I cannot even tell you what’s correct with different kind of people”.

To sum up, this citation gives a good overview of newcomers own interpretation of how they learn must successfully:

“It is about having withdrawn together with colleagues that have competence and communicate with them on what they mean, think and prefer. And then observe them when they present or talk to customers. So first, hear what they think and then observe have they apply what they think. And then copy what I think works for me. That is really it. And when I have done that several times I understand much better than before. I think that is a pattern, that I want to talk about it, then observe it and than do it myself”.

Getting access to colleagues as a question of learning as participation.

I found support for a significant, positive relationship between identification and informal learning source (.15, $p < .01$), which could indicate that the larger degree of identification with colleagues could provide a tendency to access colleagues in which they identify.

Newcomers are proactive in building informal relations and attaining informal groups at work. The also report that they find it to be their responsibility to be proactive towards colleagues, and thus being responsible for own learning. Newcomers do not learn through facilitated and controlled teaching, but moreover as a result of being integrated in informal social practices. When they are included in these informal learning arenas, they are able to get access to several colleagues in learning as participation. Some of them explain:

“I feel that my colleagues are available. Of course in the degree that they have days in which they are very busy, occupied with customers, meetings or phone calls. But beside that nothing stops me from going in to their offices and interrupt for a few minutes”.

“My boss and colleagues are very available. I can call all hours if necessary. Now, it is a lot to do, and we are not that available for each other. Sometimes it is difficult to find an hour to sit down together for updating. We struggle with that. Another times we are all at the office, and we are able to discuss and meet. But normally, we have to communicate in between busy hours”.

“My colleagues use each other a lot. One joins another at a sales meeting in order to help, because he has some previous experience that is useful....So in a way they work together but also apart, but within a very including culture”.

The significance between informal learning and available knowledge (.38, $p < .01$) indicates the importance of availability to informal learning. 82% of the respondents in the survey believe their colleagues represent the most important knowledge, and as newcomers learn through observing and practicing with colleagues, it is vital that they are available to them. About 90% of the respondents find that preferred colleagues are available when they have a job related problem, but at the same time 64% report a lack of access to colleagues. This can indicate that newcomers find that established colleagues are very forthcoming and available in theory, but in practice their availability can be quite limited due to a busy everyday schedule. Some of them explain:

“That you need to pressure but that you are a bit in the way. But at the same time they want to guide and help me. It is very busy, things are happening all the time”.

“It is not challenging at all. I have to ask to get some work tasks from my boss, and then it is like, yes, I will send you some, but then she gets a phone call or a meeting. Then she forgets about me and then you just sit there. I could have been active myself but feel that I bother them.”

“When I want my boss to show me something, he just books a meeting. That is wrong because I just want to observe how he does things. Observe how I get access to things. So I would have come far if just sitting beside him for a week, followed him around, in meetings and observed him”.

Learning and knowing in learning as participation.

Newcomers had to rely on own knowledge and finding own solutions, and work independently. That is also in accordance with what is expected of them and what they expect of themselves. This can also be understood in relation to a commonly understanding of learning as individual acquisition of explicit knowledge (Beckett and Hager, 2002). Outside formal learning arenas many newcomers do not expect to learn and obtain knowledge other than as a positive side-effect of working together. But at the same time they clearly recognize that learning as participation is most important, including the ability to communicate, observe and practice together with colleagues, that mostly is based on informal learning. Thus, these data confirms that learning as participation in a work context need to be highlighted as superior, and informal learning must be legitimized as the most important part of becoming professional knowledgeable (Solomon et al., 2001 and Van Woerkom et al., 2002). It is in the recognition and consciousness of what learning as participation is that I believe we find the potential of improving the facilitation of newcomers learning process.

Newcomers must gradually attain and integrate the values, traditions and way of thinking within the culture, or as several of them expressed; “*I need to learn the “codes” for how things are done around here.*” The focus is on the ambiguous, and not the clear aspects of the language used. It is in the specific act the professional worker shows whether she or he has understood the multiple demands of the situation. Thus, situations arise that the newcomers describe as overwhelming. It is stressful for newcomers to handle several situations simultaneously, which often is the core of professional work. Practical work comprises the ability to pay attention, improvise, exert professional judgment, be attentive and recognizing the right thing to do in various situations. No two situations are identical, thus the newcomer needs to be capable of reading each unique situation. Situations have “faces” and experienced practitioners have to recognize the diversity in them, which takes time to learn (Fuglestad, 2000). As one of them explains:

“I tried to get a hold of things that I manage and just disregarded other things. I have been in a learning situation before and don’t manage to cope with everything at once. I have to select things and then use my knowledge when it fits. This strategy has worked well. Even though it can be hard in the beginning when you feel dragged down and don’t think you can master this at all. Then I try to have a reward that one day I will get “the hang of it” and I am able to see all the connections”.

Newcomers learn to focus on the particular, varying and contextual aspects of knowledge, instead of the abstract and general aspects of knowledge, which often characterizes their educational knowledge. They recognize the need of being able to apply their educational knowledge as a question of knowing when applied in social practices at work. Knowledge becomes a participative process of knowing through their continuous dialogue with the surroundings. In such a way, knowledge will not only concern solving a given problem, but also redefining situations, deciding what is relevant as well as structuring the problem (Säljö, 2000). This can be illustrated in the following quotation:

“I brought my books which are on my desk and I often refer to them... Here is something familiar, than I turn through the pages and find something I can use. I know it is not a very scientific way of using the material. It’s just bits and pieces from here and there, but as long as it is a connection and there is a method in it, it is much easier to use it in my arguments”

Learning and knowing concern more than just performing certain techniques. Newcomers adapt to the group’s way of thinking, its artefacts and the existing ways of solving practical problems. There may be work tasks demanding completely different things, where particular aspects of the professional role are significant. Thus, a large portion of knowing in daily work involves being in the right place at the right time in order to get access to knowledge and eventually master the various work tasks. Through participation, the newcomer becomes initiated in the work rhythm, observes how the work tasks are organized and who takes on what tasks. One explains:

“...well, you have basic theory from your studies, but it is only a small paving stone of it all. It is a tool to learn business; the rest is practice, concrete courses and training. Nobody is hundred and ten percent professionally qualified, but we have a foundation to build on, a methodology to work on, but not enough practical knowledge to be up and running”.

Through interaction with experienced professionals, the newcomer acquires the tacit knowledge of the organization and its members. In this fashion, the newcomer becomes initiated into the cultural traditions, methods and values. Through participation he or she is taught how to distinguish what is important in order to be able to operate as a full member of the organization. In other words, newcomers cannot just be taught what they need to know. My experience is that the newcomer to some extent must be guided to observe, listen and attend to the ways that work tasks are solved. Through participation, knowledge integrated with the newcomer’s educational knowledge can be applied as knowing. The survey shows that 59 percent claim to be prepared concerning necessary knowledge, while this is reduced to 40 percent regarding the possibility to use previous knowledge. In combination with the interviews, lack of experience is recognized as to how to apply educational knowledge as knowing, in combination with actually having necessary experience in solving work tasks. Thus, the following quote is quite representative of what several of them explain:

“Now I have got more experience at work, so things are improving. I miss using my educational background. There is not that much focus on that once you are working. Where did all the theories from five years of higher education go...?”

When focusing on newcomers’ knowledge, I believe that our main concern must be on knowing as on how to apply and use educational knowledge in professional work. This is a huge challenge for all newcomers, but especially for newly educated. Necessary understanding of how to obtain necessary knowing must therefore represent new ways of facilitating their learning processes. Learning and knowing are situated in professional practice, and in solving work tasks, and learning needs to be understood as practice at work and to be learned through participation. Thus, a social and cultural approach to learning and knowing represent the necessity of recognizing learning and knowing as part of everyday life in organizations. Understanding the tacit element of knowledge and knowing gives an important opportunity to highlight the awareness of social participation, both formal but at least equally important, informal participation in social practices. I also believe that by focusing on knowledge as a question of knowing, we are moving towards a better understanding of knowledge and learning. We also have the opportunity to recognize the complexity of knowledge and learning, focus on knowing to achieve necessary goals, and move forward from simple and limited focus on their characteristics. As one respondent explains

“I compare it with learning a new language. You go away to a new place and are not able to pronounce the language. You have opinions that you are not able to express. So you feel that your intelligence is immediately reduced by 50 percent. It is perhaps the same in a new job. You are not able to see what you lack of knowledge. You find that things go very slow. You would have preferred to master your tasks the first day, or the second, or the second week. So then...”

Conclusion

This paper provides an empirical contribution to learning as participation for newly educated master and bachelor students. The unit of analysis is learning as situated in social practices, discussing how and what newcomers learn through participation with colleagues. They recognize the importance of getting access to established colleagues to apply their educational knowledge as knowing in professional work. The respondents in my studies need to be proactive themselves in order to get access to colleagues at informal learning arenas, due to the lack of facilitated training for newcomers. How they learn is mostly through observations of colleagues, which they clearly recognize as important to obtain necessary knowledge. Mostly, they would prefer to get more access to colleagues and be able to practice together with them. Then, they would to a larger extent learn to apply knowledge as knowing on how to perform, in learning as participation, characterized by observations, conversations and social practice.

Newly educated struggle in transforming educational knowledge into knowing on how to perform professionally. Practical work is often stressful; several situations must be handled simultaneously with multiple demands and the particular, varying and contextual aspects of knowledge must be considered and turned into knowing. It can be quite overwhelming, and far from their educational knowledge characterized by models, theories, structures, pattern and one case at the time. For them, knowledge is not learned through abstract explanations or planned learning procedures once facing professional life, but needs to be learned through practice, observations, imitations, conversations, reflections, and the use of artefacts, as a question of knowing how to perform. When gaining access and be able to practice together with several professionals the newcomer

creates their own knowing of how to perform. I therefore believe that newcomers learning processes must be understood as a question of getting access to colleagues in participation. Learning as participation must be considered superior when facilitating newcomers learning processes. That means that informal learning arenas must be highlighted as most important together with a necessary awareness of established colleagues as vital knowledge sources in the transformation from educational knowledge to learning and knowing in professional work.

Knowing and learning are ongoing, dynamic and continuing processes of construction and reconstructions in professional work. From this perspective, knowing is distributed across a variety of processes and dimensions and knowing is to be found in the process of social interaction in practice. Thus, knowing and learning are not seen as only a way to come to know about the world, but as a way of taking part and participating in the world. Knowing what and how to do things, recognizes the importance of inquiry, critical thinking and reflection. Learning and knowing need to be viewed as to sides of the same coin, and I believe that by approaching learning as participation, it increases our ability to understand the complexity of these processes.

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