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Author(s): Hökkä, Päivi; Rasku-Puttonen, Helena; Eteläpelto, Anneli

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PÄIVI HÖKKÄ, HELENA RASKU-PUTTONEN &
ANNELI ETELÄPELTO

TEACHER EDUCATORS' WORKPLACE LEARNING:
*The Interdependency between Individual Agency
and Social Context*

ABSTRACT

In order to promote collaboration among teacher-students it is essential that teacher educators themselves can collaborate and learn through participation in work organisation communities. Yet we do have quite limited understanding of teacher education organisations and how they promote collaboration and thus workplace learning among teacher educators. In this chapter our aim is to examine the interdependency between social context of teacher education department and individual agency of educators in order to get a better understanding of teacher educators' workplace learning. We ask how educators can practice their professional identity and agency and how to characterise the interdependency between social context and individual agency. We sought answers by interviewing eight Finnish teacher educators and analysed the interview data in accordance with data-driven qualitative approach. Findings suggest that social context in this organisation affords teacher educators many possibilities to practice their agency by developing their own practices and teaching. However, social context does not enhance boundary crossing between communities of practice and impedes collaboration of educators. Hence, this may prevent educators' workplace learning and also organisational development of the teacher education department.

THE IMPORTANCE OF TEACHER EDUCATORS' WORKPLACE LEARNING

Teacher education is particularly well-placed to influence future society, because all of society's members experience schooling. Yet, Korthagen, Loughran and Russell (2006) argued that only in this century has teacher education begun to be properly recognized and valued as an object of academic research. They highlighted three factors that underpin this recognition: (i) the relevance of teacher education to the reality of everyday practice in schools is questioned and this has brought pressure to rethink both the structure and the practices of teacher

education, (ii) recent studies have demonstrated that there are reasonable grounds for some of these complaints and (iii) new conceptions of learning and teaching have been developed that contrast strongly with traditional practices of teacher education. However, we know relatively little about the culture of teacher education organisations and how they are interrelated to the learning of the teacher educators. (Lunenberg, Korthagen & Swennen, 2007; Robinson & McMillan, 2006.) The culture of teacher education departments is important, not only for the educators who work there but also for those undergoing training, i.e. teacher-students, because this shapes the kind of practices that are enacted in teacher-students' future workplaces – schools. It is thus suggested that teacher education organisations should aim to function as true learning organisations, because they constitute the culture in which teacher-students are socialised. Hence, they should support a culture of continuous learning and continuous reforming of their own organisation, in order to promote such a culture among their students.

In Finland a teacher education for primary and secondary teachers is taken place at university context and thus understood as research-based practice. Even primary level teachers are required a master level basic qualifications. As Finland has continuously succeeded extremely well in OECD's international student assessment programmes (e.g. PISA, 2006), the one of the key explanations for this has been regarded the high quality of Finnish teacher education (Jakku-Sihvonen & Niemi, 2006). In order to sustain and develop the high quality of teacher education it is important to enquire the workplace learning of teacher educators. Here, the concern is to examine the kinds of workplace learning opportunities available to teacher educators, as well as the constraints on their learning within their work communities and organisation in Finnish teacher education context. The aim is to analyse: (i) the reciprocal process of how a teacher education department affords participation and collaboration, along with how the educators participate in work activities and social interactions, and (ii) what this implies for their learning through work. We understand workplace learning occurring primarily through participation in professional and work-organisation communities. Consequently, we are interested in teacher educators' experiences of opportunities to participate in different kinds of learning communities and their possibilities for collaboration. We perceive teacher collaboration as a powerful element in teachers' workplace learning (Meirink, Meijer & Verloop, 2007) when its ultimate objective is to enhance student learning and achievement (Vescio, Ross & Adams, 2008).

This study is informed by a socio-cultural approach which emphasises socially and culturally mediated practices in workplace learning. (Billett, 2004; Wenger, 1998.) We understand professional learning as an ongoing process, one that occurs as individuals participate in everyday activities within their workplace. In addition to this, we understand professional identity as something that is negotiated in an ongoing relationship between the individual and the social context. (Billett, 2007: Billett & Somerville, 2004; Eteläpelto, 2007: Kirpal, 2004.) In this study we argue that the interdependency between social context and individual agency may create a dilemma for the workplace learning. We will demonstrate how the teacher education department affords educators' possibilities to construct

their professional identity quite autonomously. However, there is a lack of collaboration between the communities of practice and this might hinder the workplace learning of educators and also the development of the whole work organisation.

In elaborating teacher educators' workplace learning, this chapter is structured as follows. Firstly, we discuss the theoretical framework and illustrate social and individual perspectives on learning at work. We address the importance of professional identity and agency, and also the interdependency between social context and individuals. In the next part we introduce the procedures used in the study and our main findings, with regard to (i) educators' opportunities and obstacles for collaboration, (ii) educators' professional identity and agency, and (iii) the interdependent relationship between the work organisation and individual educators. Finally, we illustrate the barriers between social communities and individual agency, and discuss what these imply for the learning of educators within their own work.

SOCIAL AND INDIVIDUAL PERSPECTIVES ON WORKPLACE LEARNING

The social and individual contributions to learning through work are discussed to a consideration of column (i) communities of practice and workplace learning and (ii) interdependency between individual agency and social context in workplace learning. These are now discussed in turn.

Communities of practice and workplace learning

The participatory perspective (Sfard, 1998) has become a dominant metaphor for understanding learning at work. Within this view, learning is understood as a pervasive process, one which is realized through normal working practices. The central issue in learning is thus becoming a practitioner, not learning about practice (Brown & Duguid, 1998). This perspective conceptualizes workplaces as environments which enable employees to learn through collaboration in its practices. Situated learning, became one of the dominant theories applied to learning at work, was first highlighted in Lave & Wenger's early work (1991). Their definition of situated learning assumes that learning involves a process of participation in a community of practice, and movement from legitimate participation to central participation in the community. In Wenger's later work (1998) he elaborated the concept of a community of practice, and theorized it as a group of participants who share in a joint enterprise, cohere through mutual engagement and create a shared repertoire of communal resources that members develop over time. Wenger's primary concern was how individual workers construct their identities through participation in communities of practice. The tension brought about by multi-membership in different communities is a key

element in identity construction, because of the multi-faceted and dynamic nature of identity. In the workplace learning context, this means that the construction of professional identities takes place through participation in authentic, culturally-constituted working-life contexts (Wenger, 1998).

In communities of practice, boundaries play an important role, because they both create and divide social communities. Boundaries arise as a result of different ways of engaging with other parties, different repertoires, histories, ways of communicating and capabilities. In learning, boundaries offer major possibilities. They create and connect communities, and offer learning opportunities in their own right. Boundaries are locations where different perspectives meet and new possibilities arise. However, boundaries can create divisions and be a source of separation, fragmentation and misunderstanding (Wenger, McDermott & Snyder, 2002; Wenger, 1998).

Nevertheless, limitations in the community of practice approach have been identified. In particular, criticism has been aimed at the lack of attention to unequal power relations (Fuller, Hodkinson, Hodkinson & Unwin, 2005) and the absence of individual dispositions and approaches to learning (Billett, 2006b). Furthermore, community of practice approach risks accounting only the social aspects of learning, with insufficient attention paid to the complex relations between individuals and their relations to communities (Linehan & McCarthy, 2001). Despite this, studies have established that the community of practice metaphor provides one important starting point for understanding workplace learning and professional identity construction. (e.g. Bathmaker & Avis, 2005; Fuller & Unwin, 2004; Gorodetsky, Barak & Harari, 2007; Wells, 2007.)

Interdependency between individual agency and social context in workplace learning

In recent discussions on workplace learning, the issues of work-identity have become central (Billett & Somerville, 2004; Kirpal, 2004). Identity has become particularly prominent in respect of the human-centred and creative work (Eteläpelto, 2007), because in these fields personal commitment is fundamental element for learning and professional development. However, the concept of identity has evolved in recent years. According to Hall (2001) our postmodern time has given rise to the post-modern subject, conceptualised as having no fixed, essential or permanent identity. Identity is defined as being formed and transformed continuously in relation to the ways we are represented or addressed in the cultural systems in which we engage. The concept of the self as a comparatively unchanging core containing a person's essence has been replaced by a more dynamic view of the self. Such a view emphasises the process notion of identity, with the self seen as something being continually reconstructed and renegotiated in the various contexts of everyday life, via interaction (Beijaard, Meijer & Verloop, 2004). Fenwick (2006) defines identity as an image, a symbolic code representing something the subject desires to belong to or possess something

to identify with. Identity is also a representation that the individual presents to herself/himself – and to others. For individuals' professional identity construction work and workplaces are influential contexts, offering at the same time social suggestions and possibilities for participating and identifying. Work identities can be seen as constructed in the complex interaction and negotiation processes between work processes and settings, and personal resources, attitudes, commitments and values (Beijaard et al., 2004; Kirpal, 2004). Professional core identity is constructed by means of experienced meaning and subjective gratification; hence it is something that commits individuals to their work (Kirpal, 2004; Eteläpelto, 2007).

The concepts of subject and agency have also emerged as significant aspects in discussions of workplace learning. In recent years, post-structural feminist theorists have been particularly active in considering questions of individual subjectivities and personal agency. This approach rejects the essentialist view of human nature as a free and autonomous construction of the self; it emphasises the relational nature of the self in the context of the surrounding social structure and its suggestions (Weedon, 1987; Pierre, 2000). Here, the subject is considered to be created via the ongoing effects of relations, and in response to society's codes, practices and cultural discourses (Fenwick, 2006; Pierre, 2000). For Billett (2007), subjectivity comprises the conscious and non-conscious conceptions, dispositions and procedures that constitute individuals' cognitive experience. This includes individual ways of engaging with and making sense of what is experienced through lived experience. In post-structural accounts, although the subject is seen as relational – being formed within specific social, historical, and cultural practices – it nevertheless possesses the capacity to exercise political and moral agency. Fenwick (2006) describes agency as the subject's recognition of both the process of its own constitution and of the resources within these processes. Agency is thus articulated in the subject's recognition of the processes through which alternative readings and constitutions are possible (Fenwick, 2006). Becoming a subject in a community means becoming an active agent, and this is based on the subject's reflective awareness. Thus, in order to develop one's professional subjectivity in a community, one must understand the positions one holds in the community, and how one can enter into appropriate activity orientations (Eteläpelto, Littleton, Lahti & Wirtanen, 2005; Phillips, 2002; Walkerdine, 1997).

When considering workplace learning, the interdependent relationship between social context and individual employees seem important. Billett (2004) has emphasized the importance of understanding learning at work in terms of participatory practices. He argues that learning through work involves interdependence between the participation of individuals and workplace affordances (e.g. workplace activities and guidance). This is realized through a duality comprising how workplaces afford opportunities for individuals to participate in activities and interactions, and how individuals elect to engage with what the workplace affords. Billett (2006a) also argues that the interdependencies between individual and social practices are not only reciprocal, but relational. This

relational nature becomes evident in the negotiations between workplace practices and individuals' intentions. The social practice of the workplace affords possibilities toward securing its continuity and development. However, individuals' participation in workplaces is also mediated by their intentions vis à vis their own continuity and development. The interplay between these two sets of continuities, and their relative balance or discrepancy, underpins the relations that also constitute the parameters for reconstructing the social practice of the workplace. (Billett, 2006a.)

Recently there has been active discussion on teachers' professional identity when considering their professional learning. In their review, Beijgaard et al. (2004) concluded that a teacher's professional identity is an ongoing process of interpretation and re-interpretation of experiences. It implies both a person and a context, and consists of sub-identities that more or less harmonize. The professional learning of teachers requires them to enter into deep-level transformations of their identifications, with redefinitions of their professional selves. Furthermore, Day and Gu (2007) argue that the contexts of teachers' professional learning and development are different from those of persons who do not work in human service organisations – since teachers are essentially engaged in work which has fundamental moral, ethical and instrumental purposes.

Here, we focus to elaborate the educators' experiences of the affordances offered by their workplaces for participation, and of how these affordances are utilized. The educators' collaboration in social activities is analysed using the community of practice metaphor as a starting point when considering the opportunities for learning available to the persons concerned. We ask how educators practice their professional identity (i.e. their desires to identify *with* something) and their agency (i.e. opportunities for agentic actions) and how we can characterize the interdependency between social context and individual agency. A better understanding of educators' workplace learning is sought through focusing on the following questions:

1. What kind of possibilities and obstacles for participation in social communities have teacher educators experienced concerning their work?
2. What do the educators identify with in their work and how can they exercise their agency in the work community?
3. How can we characterize the interdependency between the social communities of a teacher education department and individual educators, from the perspective of workplace learning?

DATA COLLECTION AND METHOD

This study takes place in the context of Finnish teacher education, which has been organized at university level since 1971. The education standards for teacher educators are relatively high in Finland with senior lecturer positions requiring a doctoral degree and a high level of pedagogical competence. Reported here is a

study conducted within a teacher education department with approximately 80 educators and 30 other employees. Most of the educators work as lecturers and university teachers. The department educates class teachers, subject teachers and study counsellors.

A qualitative approach was used in order to obtain an overall understanding of the learning taking place in this workplace. The major source of data consisted of transcripts of audiotapes of open-ended interviews with eight educators. We wanted to have as different and wide variety of educators' experiences as possible and thus the informants varied in age, academic status, subject taught and length of work history in the department. Informants were asked about the following issues: reasons for becoming a teacher educator, experiences of working and developing as an educator, and future expectations concerning work. The interviews also included a task in which the participants were asked to draw a diagram of every significant team and workgroup they were members. The description and analysis focused on the educator's experiences on a general and collectively shared level, rather than focusing on individual biographies or dispositions for learning. This was necessary also for ethical reasons, in order to ensure the anonymity of the persons interviewed. The interview data were analysed in accordance with data-driven qualitative approaches, utilizing a hermeneutical approach (Gadamer, 1975). Hermeneutics focuses on interpreting something of interest. A hermeneutics circle can be seen as an analytical process aimed at enhancing understanding; it places a particular emphasis on qualitative analyses by which parts are related to wholes and wholes to parts. Thus, at a general level, hermeneutics reminds of the interpretive core of qualitative inquiry, the importance of context, and the dynamic whole-part interrelations of a holistic perspective (Patton, 2002).

In the hermeneutical approach, the researchers' pre-existing personal experiences are not eliminated; rather they are accepted as an important element in the understanding and interpretation of the phenomena under study (Gadamer, 1975). Thus, the hermeneutical circle comprises a dialogue between the participants in the study and the researcher. All the authors of this study had been working in the department, thus they all had their own personal experiences of the workplace in question. To attain a more elaborated understanding of an educator's learning at work, we also used research-diary material in parallel with the in-depth interviews. The main author utilized a research diary (gathered during 2002-2005) that includes her own experiences in this workplace to record notions and perceptions concerning various shared practices in the department, for example staff meetings, other gatherings, development projects and curriculum development. Thus, our analysis is based on an abductive construction process in which we have used both data-driven and theory-based interpretation. (Patton, 2002.)

FINDINGS

Within our findings we shall first describe the teacher educators' accounts of possibilities for collaboration in their work. Next, we shall illustrate the main findings concerning the educators' identification to work and individual agency. In last section of the findings we shall describe the interdependency between social context and individual agency.

Opportunities and obstacles for collaboration

The community of practice metaphor proved to be useful concept for considering the social context of the teacher education department. All educators reported being a member of several different reference groups that are analogous to communities of practice. For most of the educators interviewed, their own subject matter (i.e. discipline) group was reported as the most important community of practice. However, cultures and working practices varied considerably across different groups. This meant that the possibilities for collaboration and learning also varied according to different subject matter groups. Some groups were described as very cohesive, collaborating intensively on a daily basis. In these communities of practice, the educators were constantly planning, putting into practice and sharing new ideas. The educators experienced this kind of working as emotionally satisfying and rewarding.

... we work together in a teaching group [subject matter group], and the way we work is that we start by discussing things and presenting different points of view, and defending our own points of view. But then generally we start to get some main idea out of it, and in the end, we usually arrive at a shared understanding of things. These moments feel good... there's no other group with the same kind of opportunity for discussion. " (Teacher educator 1)

There were also subject matter groups that functioned in a more disconnected and vague manner. In these loosely collaborating communities of practice, the educators did not necessarily collaborate on a daily basis. Nonetheless, these educators, too, emphasized the importance of their own subject matter group. An exception to this finding was with the educational science group where no identifiable community of practice existed. Basically, the teaching of educational science was conducted independently, without any negotiation, shared repertoire of resources or mutual engagement among those who taught it. The educators experienced this as causing difficulties in their own work, since it led to problems in implementing the teaching and development of the subject as a whole.

The data suggest that for many teacher educators, subject matter groups afforded a safe and natural community of practice, one in which they could professionally bond and feel a sense of identification. Nevertheless, it seems that

close-knit communities of practice created problems in terms of collaboration between different groups. The educators reported that the boundaries between different groups within the department were very clearly marked. This became particularly evident in experiences of there being no collaboration between different subject matter groups, or between subject groups and teachers of educational science. This lack of collaboration was described as complicating the implementation of the curriculum, jeopardising the quality of the education and hindering the development of the teacher education system. Indeed, one consequence was that courses were organised separately, which the educators described as a major problem. They claimed that the absence of collaboration weakened the quality of teaching, and that it made things difficult for those individual students who had to draw together ideas from separated courses:

“I am of the opinion – hopefully I’m wrong – that educational studies live their own life, and the same goes for minor studies and for multidisciplinary school subject studies. It places heavy demands on the student in trying to integrate them. I feel that it is an unreasonably demanding task for them to do.” (Teacher educator 3)

The interviewees also revealed the educators’ strong desire for collaboration, negotiation and exchanges of ideas with colleagues within the department. Indeed, some educators felt threatened by their colleagues’ increasing isolation and concentration on their own academic careers and qualifications.

“ I have a kind of idealistic way of thinking: that we could have a lot of innovative people here, people with fresh thinking, people who’d be willing to pull together, and develop teaching and ways of working and everything. But I’m afraid that people are starting to give more and more value to purely academic qualifications, and we’re getting more and more of the kinds of individuals who don’t ever get together with each other at any point...” (Teacher educator 6)

The educators also described the discrepancies between different groups that emerged in the curriculum development process. Curriculum development was described as a process where in addition to the shared definition of the goals and contents of the curriculum, the significance of the teacher’s own subject matter was underlined. The process was mostly described as a kind of competition, one in which the educators of various subject groups negotiated with each other to secure satisfactory objectives, structures and study credits for their own subject. Furthermore, the educators described experiences of what they understood as a general spirit of competitiveness within the department. For example, they felt little incentive to express new pedagogical ideas in public, since as they saw it the department had a tradition of being critical and unappreciative:

“...we have a bit of a tradition of shooting things down. When somebody develops something new, then in general the idea takes off in some way... There’s a kind of disparagement, people clamming shut or questioning [the whole thing]. So you don’t get anything like ‘well done, you’ve done really good work.’” (Teacher educator 8)

Although many educators emphasised the problem of a lack of collaboration between the subject matter groups they also described some attempts to develop shared projects and teaching. These attempts were, however, described as fragile, involving separated projects based on mere separate individual efforts. Thus their role and influence was rather weak for the community as a whole. Albeit collaboration inside the department was rare, the workplace still afforded many possibilities to participate in different kinds of goal-directed activities outside the department. The educators reported being active participants in national and international networks, and were able to make connections and networks very independently.

Teacher educators’ professional identity, agency and learning at work

The second question addressed to understand how the educators identify with in their work, and how they were able to exercise agency in their work community. The data suggest that the educators experienced a strong sense of professional identity in their own teachership and in their development as educators. They defined teaching and the teaching of the core knowledge and skills of their own field as their core work. In addition, the interviewees reported that their own discipline and subject matter strongly influenced their professional identity. They often described their most important professional challenges as being the development of their own subject and its pedagogics, establishing its relevance to students, along with skills required in it. Given their work, it was also important for them to secure the status of their subject within the field of school teaching and teacher education. The educators were thus very conscious of the importance of their own subject as it affected their teachership – even if at the same time they saw this as hindering collaboration with their colleagues.

“ Well, for those of us who are teachers of some subject, we have the problem that we’re so bound up with our own subject that it pretty much makes us regard it as *our* subject. It’s like...well, if not the most important thing in the world, the second important anyway. And for example, many of these integration discussions come to nothing due to the fact that people unconsciously see the situation as one of ‘how can such and such a subject be integrated into my subject – in such a way that it can benefit my subject.’ It’s not at all a question of co-operation giving rise to some kind of synergy that would benefit both parties.” (Teacher educator 3)

The foundation of academics' work is research and teaching. Yet, most of these educators located their professional identity in their teachership, in developing as teachers, and their subject matter. Most educators did not experience research as their core work and described research as subordinate to their own teaching. In other words, research was defined as a tool for their own development as educators, not as a tool for the production of new knowledge.

Certainly, the workplace offered educators possibilities to exercise agency by committing themselves to their teaching, their teachership and their own subject matter. They were conscious of their own possibilities and spaces for acting within the workplace. Without exception, they reported that they were totally autonomous in their teaching and they could carry out as they wished. They did not feel, for example, that there were managers who wanted to control their teaching or tell them how it should be done. They identified this autonomy as the natural basis of their academic work, and the freedom to practice it as they wished was one of the most rewarding aspects of their work.

“I can affect my own work to an enormous extent. And just because everyone can take care of their own job, you can do whatever takes your fancy... In the case of my own teaching group I don't need to ask anyone what I should do with them... It's a really positive thing in this work that you can set yourself challenges and try things out, see if you can do something in a new way.” (Teacher educator 8)

The culture of the department emphasises the autonomy of those who teach in it, provided rich learning opportunities for the educators. This offered them possibilities to focus on matters that served their professional development – implementing and developing their teaching. They reported that learning at work was closely connected with their own professional development as educators, and that this development was realised through planning and implementing their teaching and research. They were also very satisfied with the opportunities for formal education offered by the department, which gave them the opportunities and the resources for their own education, training and development projects.

Interdependency between communities of practice and autonomous educators

The findings suggest that the strong culture of the communities of practice in the department created a problematic context for the educators' learning at work. Strong subject matter groups permitted these educators to identify with, and support their subject matter-based professional identity. Yet, the subject matter groups – as communities of practice – existed as natural constructs of social reality, and the educators were expected to settle in and to bond with the group. The strong structure of the communities of practice limited participation and created barriers to mutual collaboration. The data suggest that boundaries did not create new opportunities for learning; rather, they underlined the differences between the

communities of practice. Every interviewee would have like more collaboration among the educators. Yet, they reported that various attempts to promote collaboration had failed to lead anywhere, producing no real benefits in developing the department as a whole. Furthermore, they complained that they were unable to apply their own expertise for the benefit of the department; unable to share it safely with others. It actually seemed that educators tried to shelter their own ideas from the rest of the organisation because they were afraid of these been shoot down. The practices that *were* shared, such as departmental meetings, were described as fairly irrelevant occasions in which collaboration, sharing and the construction of new meanings did not materialize.

“From the point of view of doing our work, the problem here is that people to a large extent guard their autonomy and independence, yet – since our teaching is supposed to be co-operative – this leads to difficulties. We all have our courses in our workplans and we teach them – and coordinating them doesn’t work because everybody is guarding this ‘teacher’s autonomy’ which is of course something that’s actually protected by law in the universities – but here it’s sometimes taken rather to extremes.” (Teacher educator 7)

However, while denied affordance for shared practices, they were satisfied with the level of autonomy that the work culture provided them. This allowed them to concentrate on practicing their own teachership, and to develop their own subject matter and its pedagogics. The data suggest that this interdependency between the social context of separated communities of practice and the realization of individuals’ own agency as autonomous educators creates a dilemma. The educators would like to remake the department’s culture, moving it towards a more collaborative model, one that would give them the chance to share meanings with colleagues, make new connections and learn from each others. However, having been offered so many opportunities to practice their agency by concentrating on their own teaching and learning, there is neither enough individual willingness nor enough social pressure to change the dominating culture. In other words, the teacher educators have chosen to be subject to strong boundaries between communities of practice, accepting this as the natural state of the social reality of the department.

CONCLUSION

The findings showed that the educators belonged to many communities of practice connected to their work. Clearly, the most important communities of practice were the educators’ own subject matter group. The findings also suggested that the barriers between the different subject groups within the department were high, and that there was very little collaboration between the groups. In other words, crossing the boundaries between communities of practice was rare. The data suggested that

the educators' professional identity was strongly influenced by their desire to teach, and by the subject matter they were teaching. In addition, the educators experienced a strong sense of autonomy in their teaching and learning at work. They reported that learning at work was mainly connected to how they could prepare, plan, develop and implement their teaching. However, there were problems in the educators' workplace learning – and also in organisational development – due to the interdependency between the organisations social structure of separated communities of practice on the one hand, and educators desire to function independently and autonomously on the other.

The interdependency between social context and the individual educators becomes evident in the relationship between educators' intentions and the work practices of the department. The educators had a strong sense of agency in their teaching and learning at work. However, it seems that this leads paradoxically to a situation in which an individualistic work culture cannot easily be developed towards a more collaborative one, since the work community offers educators the autonomy to practice their agency by teaching and developing their work independently. It seems that there is neither the social pressure nor the degree of individual intention that would promote collaboration between different subject matter groups. Hence, the social context supports the educators' own learning in relation to their subject matter and teachership, but it hinders the development and learning of the whole work organisation. According to our findings, individual learning at work does not necessarily promote organisational development if the social context do not afford enough opportunities for individuals to share the meanings with each other, to work together and to collaborate. This is in line with the argument of Nonaka and Takeuchi (1995) who suggested that if individuals confine themselves only to developing their own competence separately from their organisation, organisational learning can be hindered.

Recent studies on teacher education have emphasised the importance of collaborative models which allow teacher students to learn by participating. (e.g. ten Dam & Blom 2006.) In order to promote such teacher education it is essential that the teacher educators themselves can collaborate and learn through participation in work organisation communities. Thus, as a practical conclusion we would suggest that if a teacher education department aims to support the work of educators by providing opportunities for collaboration between different subject groups and communities of practice, and thus to promote the organisation as a whole, it is essential to consider two main issues. First, it is important to secure the teacher educators' individual autonomy for identity construction. However, merely securing professional identity construction does not in itself ensure educators' professional development (Timperley, Wilson & Barrar, 2007). In the worst case, securing the construction of professional identity in isolation can lead to greater barriers between different communities of practice. Furthermore, it is essential to pay attention to the boundaries that are maintained by the social context. Recent studies have addressed the importance of boundary crossing and interdisciplinary approaches in teaching and learning in higher education. (e.g. Savin-Baden & Major, 2007; Woods, 2007.) In the case of teacher

education, interdisciplinary should mean crossing boundaries not only between different disciplines in university curricula but also crossing boundaries between different subject matter groups inside the teacher education department.

In theoretical terms, this study has emphasised the importance of understanding the interdependency of social context and individual agency as a factor influencing on workplace learning. In our case the social context of the teacher education department and the strong autonomy of individual teachers led to evident constraints in workplace learning. Educators were able to practice their agency at individual and work community level although they could not practice their agency in organisational level. However, this would be important to widen the learning outcomes to benefit the whole work organisation. Further, boundaries between the communities of practice need to be lowered if there is a wish to promote the work organisational learning and development.

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REFERENCES

- Bathmaker, A-M. & Avis, J. (2005). Becoming a lecturer in further education in England: the construction of professional identity and the role of communities of practice. *Journal of Education for Teaching*, 31 (1), 47–62.
- Beijaard, D., Meijer, P. C. & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education* 20 (2), 107–128.
- Billett, S. (2004). Learning through work: workplace participatory practices. In H. Rainbird, A. Fuller & A. Munro (eds.) *Workplace Learning in Context*. London: Routledge
- Billett, S. (2006a). Relational interdependence between social and individual agency in work and working life. *Mind, Culture and Activity* 13 (1), 53–69.
- Billett, S. (2006b). Work, subjectivity and learning. In S. Billett, T. Fenwick & M. Somerville (Eds.) *Work, Subjectivity and Learning: Understanding Learning through Working Life*. Technical and Vocational Education and Training Series 6. Dordrecht: Springer, 1–20.
- Billett, S. (2007). Exercising self through working life: Learning, work and identity. In A. Brown, S. Kirpal & F. Reuner (Eds) *Identities at Work*. Technical and Vocational Education and Training Series 5. Dordrecht: Springer, 183–210.
- Billett, S. & Somerville, M. (2004). Transformations at work: identity and learning. *Studies in Continuing Education*, 26 (2), 309–326.
- Brown, J. & Duguid, P. (2000). Organisational Learning and Communities of Practice: Toward a Unified View of Working, Learning and Innovation. In E.L. Lesser, M.A. Fontaine & J.A. Slusher (eds.) *Knowledge and Communities*. Butterworth Heinemann.
- Day, C. & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: sustaining commitment and effectiveness over a career. *Oxford Review of Education*, 33 (4), 423-443.
- Eteläpelto, A. (2007). Työidentiteetti ja subjektius rakenteiden ja toimijuuden ristiaallokossa. [Workidentity and subjectivity in the riptide of structures and agency] Teoksessa A. Eteläpelto, K. Collin & J. Saarinen (2007) *Työ, identiteetti ja oppiminen. [Work, Identity and Learning]* WSOY.

- Eteläpelto, A., Littleton, K., Lahti, J. & Wirtanen, S. (2005). Students' experiences of participation in an intensive long-term learning community. *International Journal of Educational Research* 43, 183–207.
- Fenwick, T. (2006). Escaping/becoming subjects: Learning to work the boundaries in a boundaryless work. In S. Billett, T. Fenwick & M. Somerville (Eds.) *Work, Subjectivity and Learning: Understanding Learning through Working Life*. Technical and Vocational Education and Training Series 6. Dordrecht: Springer, 21–36.
- Fuller, U. & Unwin, L. (2004). Expansive learning environments: integrating organisational and personal development. In H. Rainbird, A. Fuller & A. Munro (eds.) *Workplace Learning in Context*. London: Routledge.
- Fuller, A., Hodgkinson, H., Hodgkinson, P. & Unwin, L. (2005). Learning as a peripheral participation in communities of practice: a reassessment of key concepts in workplace learning. *British Educational Research Journal* 31 (1), 49–68.
- Gadamer, H.G. (1975). *Truth and Method*. London: Sheed and Ward.
- Gorodetsky, M., Barak, J. & Harari, H. (2007). A cultural – ecological edge: A model for a collaborative community of practice. In M. Zeller Mayer & E. Munthe (Eds.) *Teachers learning in communities. International perspectives*. Rotterdam: Sense Publishers.
- Hall, S. (2001). The question of cultural identity. In S. Hall, D. Held & T. McGrew (Eds.) *Modernity and its Futures*. Oxford: Blackwell Publishers Ltd.
- Jakku-Sihvonen, R. & Niemi, H. (2006). Introduction to the Finnish Education system and teachers' work. In H. Niemi & R. Jakku-Sihvonen (Eds.) *Research-based teacher education in Finland*. Turku: PAINOSALAMA
- Kirpal, S. (2004). Researching work identities in a European context. *Career Development International* 9 (3), 199–221.
- Meirink, A., Meijer, P. & Verloop, N. (2007). A closer look at teachers' individual learning in collaborative settings. *Teachers and Teaching: theory and practice*, 13 (2), 145–164.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22, 1020–1041.
- Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Linehan, C. & McCarthy, J. (2001). Reviewing the “Community of Practice” metaphor: an analysis of control relations in a primary school classroom. *Mind, Culture, and Activity*, 8 (2), 129–147.
- Lunenberg, M., Korthagen, F. & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education* 23, 586–601.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd Edition. Thousand Oaks: Sage.
- Phillips, D.K. (2002). Female preservice teachers' talk: Illustrations of subjectivity, visions of “nomadic” space. *Teachers and Teaching: Theory and Practice*, 8 (1), 9–27.
- PISA 2006: *Science Competencies for Tomorrow's World*. (2007). Vol., 1. OECD.
- Robinson, M. & McMillan, W. (2006). Who teaches the teachers? Identity, discourse and policy in teacher education. *Teaching and Teacher Education*. 22, 327–336.
- Savin-Baden, M. & Major, C. H. (2007). Using interpretative meta-ethnography to explore the relationship between innovative approaches to learning and their influence on faculty understanding of teaching. *Higher Education* 54, 833–852.
- St. Pierre, E. A. (2000). Poststructural feminism in education: An overview. *Qualitative Studies in Education* 13 (5), 477–515.
- Sfard, A. (1998). On two metaphors for learning and dangers of choosing just one. *Educational Researcher*, 27 (2), 4–13.
- Ten Dam, G. & Blom, S. (2006). Learning through participation. The potential of school-based teacher education for developing a professional identity. *Teaching and Teacher Education*, 22, 647–660.
- Timperley, H., Wilson, A. & Barrar, H. (2007). *Professional learning and development: best evidence synthesis iteration (BES)*. Paper presented at the Earli, 28.8 – 1.9.2007. Budapest, Hungary.

CHAPTER TITLE

- Vescio, V., Ross, D. & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80–91.
- Walkerdine, V. (1997). Redefining the subject in situated cognition theory. In D. Kirsner, & J. A. Whitson (Eds), *Situated Cognition: Social, Semiotic and Psychological Perspectives*. Mahwah, NJ: Lawrence Erlbaum Ass. 57–70.
- Weedon, C. (1994). *Feminist Theory and Poststructuralist Theory*. Oxford: Blackwell.
- Wells, G. 2007. Who we become depends on the company we keep and on what we do and say together. *International Journal of Educational Research*, 46, 100–103.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: University Press.
- Wenger, E., McDermott, R. & Snyder, W. (2002). *Cultivating Communities of Practice*. Boston: Harvard Business School Publishing.
- Woods, C. (2007). Researching and developing interdisciplinary teaching: towards a conceptual framework for classroom communication. *Higher Education* 24, 853–866.

AFFILIATIONS

*Päivi Hökkä,
Department of Educational Sciences,
University of Jyväskylä*

*Helena Rasku-Puttonen,
Department of Teacher Education,
University of Jyväskylä*

*Anneli Eteläpelto,
Department of Educational Sciences,
University of Jyväskylä*