# Connectedness in nomadic work: the case of practice based education

Monica Divitini, Eli M. Morken Norwegian University of Science and Technology (NTNU) Trondheim, Norway monica.divitini@idi.ntnu.no, elimalan@idi.ntnu.no

**Abstract.** In this position paper we discuss practice based education as a form of nomadic work. Mobility of students across different learning arenas is not only physical, but, even more important, takes place across different physical, social, and cultural contexts that impact in different ways on the learning process. In this paper, based on our experience with teacher education, we identify connectedness as one critical issue in nomadic work.

### Introduction

Practice based education is centred on the idea that to learn professional skills students need to experience how the professional community works and take part in the relevant practices of this community. Practice based education takes place across different learning arenas, and involves a number of communities. In the case that we focus on, practice based teacher education, students spend part of their time at the university and part in schools where they are placed for limited periods, with the aim to participate to the school activities and do actual teaching.

These students can be seen as *nomadic workers*. When they are at the university, they are often on the move, e.g. to attend lectures, to access resources for example in libraries and laboratories, to meet with friends and peers. At their practice school they are moving within the school, from class to class. They are not only mobile within these two learning arenas, but also across them. In fact, students have to move often from university to schools and vice versa to attend the various learning activities. These might be, for example, seminars organized by the university to bring students together and promote shared reflection, but also activities scheduled by the students themselves, for example, for meeting peers with whom they have to produce a collaborative assignment. Students are not only mobile, but when they are on practice schools they are also distributed, since for practical reasons, it is not always possible to place all the students of a course at the same school. While the students can be seen as being mobile between different physical spaces, the main challenges in many instances are related to their mobility across different communities and the different roles they play in these communities.

Our understanding of practice based education builds on a long term cooperation with the programme for teacher education at our university. In particular, we are focusing on two different lines of studies. The first line of study, which we have followed for a longer period, is a one-year course building on a bachelor or master degree. This course is organized with two main practice periods, one in the autumn and one in the spring. During these periods students go to different local schools to gain teaching experience and be part of a real teacher community. More recently, we have started studying the five-year integrated programme that allows students to combine their major with practice based education. This provides us with new opportunities to study how students get

Divitini & Morken

integrated in the teachers' community when they are part of it over a longer period of time.

To support students from a social and pedagogical point of view the course administrators organize students into social structures of various sizes, which have a central role in the practical organization of activities as well in sustaining contact among students and promote reflection. However, at times students' mobility impacts on the capability of students to participate to some of these social structures in a satisfactory way. The main focus of our research has been on studying how students' interaction within different social structures is affected by their mobility, with the aim of introducing supporting technology.

### Connectedness

Students of practice based education face a number of problems related to the nomadic nature of their learning, including limited possibilities for information and experience sharing with their peers, difficulties in coordinating activities, reduced help from their supervising staff (Morken et al. 2007).

In this position paper we want to focus on one issue that we believe to be relevant for all nomadic workers, i.e. *connectedness*. This is described by Baren et al as "a positive emotional experience which is characterised by a feeling of staying in touch within ongoing social relationships" (Baren et al. 2003). More recently, putting less emphasis on the social aspect, Nardi states that "A feeling of connection is a subjective state in which a person experiences an openness to interacting with another person" (Nardi 2005).

The initial data that we have collected seem to indicate that connectedness plays an important role in determining students' well being as well as their readiness of getting involved with others in relation to the work they have to perform and their learning. If they do not feel they are connected to the other members of the groups and communities they are member of, it is difficult for them to communicate with others to e.g., get help in their teaching, share experiences, and reflect on their learning and their role as teachers. This has clearly negative consequences on the learning process and the development of their identity as teachers. From this point of view we are interested in understanding better how different settings affect students' ability both to create and maintain Nomadic work in fact impacts on people connectedness to the connectedness. communities they participate to. In the case of students, when they move away from university, they get disconnected from their main community, i.e. the one formed by their peer students. At the same time, they get closer to the teacher community, making easier to connect to them. It is however important to stress that physical connectedness, i.e. sharing the same physical spaces, does not necessarily imply feeling connected. For example, when students are at their practice school they are not necessarily "in touch" with the teachers at the school, and they might still feel more connected to their peers, even if they are physically disconnected by them. At the same time, as widely recognized in the literature (Turner et al. 2005), we acknowledge the critical role of shared physical spaces in promoting cooperation and information sharing. From this perspective, it is interesting here to mention the school adoption, a week when most of the teachers at the practice school are away, while the practice students take over all the teaching. In this situation students are no longer peripheral members of the teachers' community, but they start playing being that community, also taking over all the physical spaces of the

Divitini & Morken 2

teachers and appropriating them for their own needs (Morken et al. 2007). Spaces, and in particular displaying areas, play during this week a critical role in supporting cooperation and coordination of the student community, at the same time, preserving traces of their main inhabitants.

### **Conclusions**

In this paper, building on our studies of teacher education, we have identified practice based education as a form of nomadic work. We have also identified connectedness as an important aspect of nomadic work, which we believe impacts not only on workers well being from a social point of view, but also on their capability to work with others and reflect on their practice (Schön 1983). While support for nomadic workers has often focused on providing mobile access to distributed resources, we believe that support to nomadic workers needs to put more attention on supporting their connectedness to the different social networks they participate to. This is necessary to create the feeling of trust and shared identity that are at the basis of cooperation and reflection. Supporting connectedness to different communities while mobile requires, we claim, an artful integration of mobile and ambient technologies, taking full advantage of the contamination of virtual and physical environments. This implies that support must be provided not only through mobile personal devices, but also by enriching the physical environments that are inhabited by communities. This contamination, we believe, should aim to strengthen the interactions among physically collocated communities as well as creating virtual arenas to nurture the geographically distributed ones, contextualizing workers' experiences both socially and physically.

## References

- Baren, J.v., IJsselsteijn, W., Romero, N., Markopoulos, P., and Ruyter, B.d. "Affective Benefits in Communication:The development and field-testing of a new questionnaire measure," PRESENCE 2003, Aalborg, Denmark, 2003.
- Morken, E.M., Divitini, M., and Haugaløkken, O. "Enriching spaces in practice-based education to support collaboration while mobile: The case of teacher education," *Journal on Computer Assisted Learning (JCAL)* (23) 2007, pp 300-311.
- Nardi, B.A. "Beyond Bandwidth: Dimensions of Connection in Interpersonal Communication," *Computer Supported Cooperative Work (CSCW)* (14:2) 2005, pp 91-130.
- Schön, D.A. The Reflective Practitioner: How Professionals Think in Action Basic Books, 1983.
- Turner, P., and Davenport, E. (eds.) Space, Spatiality and Technology. Springer, London, 2005.

Divitini & Morken 3