Educational blogs in teacher education – Blending face-to-face and virtual learning activities

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Abstract

This paper presents a study of three campus courses of Swedish student teachers' experiences during 2007 and 2008 when they used educational blogs blending face-to-face and virtual learning activities. In order to investigate their experiences and the circumstances that influenced their way of engaging in their blogs, 38 narrative interviews were carried out.

To illuminate how information and communication technology (ICT) affordances and the blended environments were perceived, the data were analysed in light of Greeno's theory of affordance. Furthermore, a socio-cultural theory by Vygotsky was used to analyse students' social interaction within their groups.

The paper presents a discussion of the circumstances in which students engage in their blogs. The students' experiences of affordances in respect of blending face-to-face and virtual learning activities and the importance of social interaction within the groups are outlined.

Introduction

The concepts of *open diaries*, *weblogs* and *blogs* have developed and spread rapidly over the past two decades. This idea of individual writing and instant worldwide publishing, inviting others to comment, seem to meet a human need for reflection and communication. However, the blogging culture has not had any major impact on teacher education in Sweden, even though reflection and dialogue are considered essential for learning. The potential integration of blogs into campus courses to support learning has not yet been fully explored, but could be one way of blending face-to-face and on-line learning activities. This paper presents the results of a study carried out at a Swedish teacher training programme during 2007/2008. The study looks at how students chose to use blogs for educational purposes, and how they experienced this

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type of work. In this text teacher educators will be referred to as *teachers* and student teachers as *students*.

Background

This section presents some research that describes blogs in learning environments in general and as part of a blended learning initiative.

Blogs in learning environments

Since the 1990s, blogs have made all Internet users presumptive publishers. Even without any advanced skills in home-page editing, it is relatively easy to write and publish text, pictures, videos, and links on a private blog, and these instant publications can be read and commented on by others. Various blog genres have developed over time, depending on the purpose the blog serves. These include personal blogs, group blogs, topic blogs, blogs about content; text blogs, picture blogs, video blogs, or on their audiences; individual blogs or community blogs (Herring et al. 2004). When blogging found its way into the corridors of schools and higher education, a genre of educational blogs emerged. The educational genre stretches across various blog genres, depending on the purpose of the blog and how students choose to use it. An educational blog may contain different kinds of media; and it can be used for both individual reflections and group discussions.

One frequent aim of using blogs within the educational arena is to encourage reflection and critical thinking in support of the learning process (Chaczko et al. 2007; Divitini & Haugalokken 2005; Stiler 2003) as well as collaboration and peer support (Ganley 2004; Hall & Davidson 2007). There are also papers written about blogs, pointing out that such communication may support professional discussion (Romono 2008) and encourage reflective learning (Hall & Davidson 2007).

Blogs as part of a blended learning initiative

Oravec (2003) describes blogs *as a creative middle-space*, something between face-to-face and digital, when she points out that the blending of these two is very student-determined: they can choose how much face-to-face interaction they incorporate into their blogs, and vice versa.

The use of blogs as a learning activity in campus courses could be seen as a move towards initiating an environment of blended learning. Salen (2007) has compared 17 studies looking into the use of blogs to introduce a blended learning environment in higher education in Australia,

Hong Kong, Norway, the United Kingdom, and the United States of America. The reported aim of mixing face-to-face meetings with blogs in these studies was to enhance reflection, interaction, collaboration and confidence among the students. Salen points out the positive results of the use of blogs in a learning environment being that students engaged in reflective thinking and collaboration. As examples of obstacles, Salen describes students' problems with technology and their dissatisfaction with blogs due to them being too public.

However, some experiences of offering students educational blogs as an option for reflecting on their own learning have reportedly been disappointing. Divitini et al. (2005), for example, describe their setbacks when only one student out of 34 used the blog as intended. The reason for this, besides a lack of time and having experienced technical difficulties, was that the students did not feel the need for blogging since they could interact with each other face-to-face in class in any event.

Blended learning

We have, for some time, divided higher education into campus courses using face-to-face learning activities, and distance courses, in which all or at least a major part of the learning activities are carried out online. There are significant differences between these two 'learning cultures', and they have influenced one another to the extent that we now face learning contexts that integrate face-to-face and digital interaction (Garrison & Kanuka 2004). This mix, often referred to as *blended learning*, can be understood and carried out in various ways. Consequently, there are also different approaches when it comes to defining the concept. This indistinctness could be considered as a weakness; indeed, some researchers find the concept too vague to use at all (Oliver & Trigwell 2005). On the other hand, it could be regarded as a strength, giving teachers and policymakers the space to create a concept of *blended learning* suited to their own contexts (Sharpe et al. 2006). This reasoning – of designing a blended context – is similar to the mixed environment the young people of today create in their private lives. These "digital natives", as Prensky describes them (2001), have grown up using ICT and communicate with their friends face-to-face as well as digitally in a relatively integrated way. This way of blending would be familiar to them, therefore.

Garrison and Kanuka (2004) agree with the idea that *blended learning* is a question of design, integrating face-to-face and virtual activities.

Their definition of blended learning, which will be used in this paper, emphasises how these concepts will be joined: "*Blended learning is an integration of face-to-face and online learning experiences – not a layering of one on top of the other*" (ibid.:99).

Ginns and Ellis (2007) argue that there are few studies reporting on how students who participate in campus courses perceive the integration of face-to-face and ICT-supported activities. The reports to date have looked at students' experience of the difference between the face-to-face and virtual options, rather than at how these two options may support each other as a concept of *blended learning*.

A research study of students using blogs in three courses

The campus courses in the teacher education programme at the Swedish university described in this paper are still mainly based on face-to-face interaction. Even though the pace of its introduction may be considered slow, ICT has found its way into the teaching context. Communication by e-mail and virtual learning environments is frequently used, although concepts like *digital portfolio*, *digital individual development planning* and *blogs* are in different stages of being tried out.

Three courses of students using blogs

During the academic year 2007-2008, three groups of student teachers participated in compulsory courses in which blogs were introduced. Teachers from the ICT Department at the Faculty of Teacher Education were involved in all these courses, supporting the students in the use of blogs for different educational purposes. All students in these three courses were offered lectures and workshops in order to learn how to blog using text, sound, pictures and video.

Course A

In the autumn term of 2007, 222 students started their first compulsory course in the teacher education programme on campus. The teachers responsible for the course had not advocated the idea of using blogs as a tool to support individual reflection. Thus, the ICT teachers participating in the study chose to offer the students to use blogs for individual reflection on voluntarily basis.

Course B

At the same time, 57 students participated in the same compulsory course as course A, although 130 km from the university campus. In order for these students to receive as much face-to-face tuition as those participating in course A, teachers from the university traveled to the remote

campus to deliver lectures and host seminars. In collaboration with the ICT teachers, course B teachers introduced blogs to the students on a compulsory basis. These students used their individual blogs as group blogs. In smaller groups, the students were tasked with reflecting on the prescribed literature and transforming course content for practical use.

Course C

During the spring term of 2008, 70 students participated in a compulsory course on campus, and were introduced to blogs as a tool for reflection. Both the teachers responsible for the course and the ICT teachers planned the use of blogs together. The blogs were devised as group blogs, and the student groups were assigned to document and reflect on their learning process during group work.

Aims and questions

The aim of the study was to illuminate how student teachers chose to use their educational blogs and their experiences of ICT affordances and constraints. Furthermore, this study aimed to provide an insight into relationships between the students' choice and factors such as their age and prior experience, as well as the teachers' introduction of and arguments for educational blogs.

The research questions arising from this study are as follows:

- How do the students choose to use their blogs, and how can different choices be understood?
- How do blog activities and class activities relate to each other?
- What ICT affordances and constraints do students experience using blogs?
- What impact do characteristics like age, gender and prior experience have on the students' experiences and choices?

Methodology

Blog genres, blended learning, learning dialogue, etc. are concepts we interpret and construct in relation to a social context. Moreover, students' individual understanding of their learning environment will influence their individual choices as regards how to use the blogs as well as their experiences.

As an ICT teacher, the author took constructivism as an epistemological starting point and aimed at understanding how blogs could be used from the students' perspective. A hermeneutical approach was used in this study, therefore. Hermeneutics focuses on interpreting and

understanding the objects of study, and allows the researcher to interpret and relate data to his or her own prior knowledge (Ricoeur 1976).

Methods

All students in all courses were invited to voluntary, semi-structured interviews. Thirteen students from course A, 13 from course B, and ten from course C volunteered to be part of the study. Three of the informants were doing both course A and course C.

The interviews were carried out face-to-face (5), by phone (28) or by online chat (3), and lasted between 35 and 90 minutes. Except for the online chat, the interviews were digitally recorded and transcribed. Course evaluations brought additional data to this study, as did the blogs that the majority of the students made available for the study. A thematic content analysis was used to structure data, and identify themes and theories in order to gain insight through a hermeneutic interpretation. A more detailed account of these theories will follow.

Emerging themes

As a thematic content analysis was used, the first reading of the transcribed interviews aimed at identifying themes. The students' different perceptions of the affordances of blogs for educational purposes came out very clearly. Given the author's prior experience of students' diverse understanding of and attitudes towards ICT, this finding was not surprising. Greeno's (1994) theory of affordances was, therefore, used to gain insight into students' interaction with educational blogs. However, students' narratives showed that their choices about how to use their blogs were clearly related to their experiences within their respective groups. Thus, theories from the socio-cultural tradition, e.g. by Vygotsky were added to the theoretical framework. Furthermore, most informants addressed their own as well as the other students' age as playing a crucial role when it came to how they approached ICT. Finally, the theme of blending face-to-face and digital activities emerged in most of the interviews. The four themes could, therefore, be described as follows:

- Age and attitude
- ICT affordance
- Blending face-to-face and digital activities, and
- Social activity.

Ethical issues

All necessary ethical requirements by the University of Umeå, as outlined by the Swedish Research Council (2001), were followed in this

study. Accordingly, the aspects of beneficence, non-malfeasance, informed consent, and anonymity were taken into account in planning and carrying out the research, and approval for the research design was achieved at the appropriate level of the organisation. The author has worked as a teacher in the ICT Department since 2002, and is familiar with the context, despite not having used blogs for educational purposes. As a doctoral student, the author's interest lies in how the didactic use of ICT can and is developed within learning environments. Because the author's work and research occur in the same context, it is imperative that distance is maintained from the object of study, and that prior understanding of that object is clarified. Therefore, the author chose not to take an active part in any of the courses concerned.

Theoretical framework

As described earlier, the study developed four themes that emerged through an analysis of the students' narratives. To understand some of the interactions between these themes, arguments are drawn from the theories described below.

Theory of affordances

The theory of affordances goes back to Gibson (1977), who presented the idea that animals could perceive information – affordances – within nature and could thereby provide themselves with food and shelter. Gibson's positivistic ecological theory has inspired researchers to widen the concept of *affordance* to incorporate not only nature but also the human environment, in which all kinds of objects may have affordances, that is, something to offer people that allows them to perform an action.

Greeno (1994) developed the concept further by adding a corresponding quality, namely ability, within the human being. He pointed out the relationship between the abilities of an actor and the affordances of an object. Thus, Greeno takes a more constructivist approach when he discusses *affordances* and *abilities* as interrelated concepts, constructing each other: "*Neither an affordance nor an ability is specifiable in the absence of specifying the other*" (Greeno 1994:338). Greeno's theory could, therefore, be transcribed as follows: An object may have some *affordances*, and if the actor has the *ability* to perceive and act according to those affordances, the *intended activity* will take place. However, the theory of affordances does not consider social interactions and how these may cause individuals to make different choices. Therefore, when the importance of the group came out very clearly in the interviews, theory from the socio-cultural tradition was added.

Socio-cultural theory

Some of the main perspectives on socio-cultural learning originate from Vygotsky (1978), where he describes *learning* as "situated", "mainly social", "distributed", and "mediated". Furthermore, the language we speak is considered an essential condition for any learning activity. In other words, learning does not take place in an objective, external environment or strictly in our minds. Learning is situated in social and physical contexts. There is a need to consider the historical and cultural contexts, as well as the relationships and interaction between individuals participating in the learning activity. As human beings, we are all unique and we do not all share the same skills or experiences. Knowledge could thereby be described as distributed, and learning as a social activity through which we learn from each other. Vygotsky (1978) also introduced the idea of the *zone of proximal development* as important to our mind's development. He defines this zone as follows (ibid.:86): "*the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers*".

When learning activities take place in social contexts, there is a need to mediate the learners' thoughts, questions and responses. The most important mediating artefact in this process has always been our language. *Communication* could be described as a process in which what we know becomes available to others (Dewey 1999). We do not only use our spoken language to communicate face-to-face: we have created artefacts to support this social mediation, namely books, pictures, ICT, etc. These artefacts represent different traditions of communication and offer various ways of mediating learning.

Irrespective of whether we define *learning* as a strictly individual or a social activity, very little learning will come about if the individuals do not have the motivation to take active part in learning activities. Using a socio-cultural perspective, Dysthe (2003) describes the required motivation as expectations of society or social contexts. Furthermore, Dysthe (ibid) points out the need for confirmation and the experience of group belonging in order to motivate the students. When learning is socially mediated it is of great importance that students share and work towards the same learning goals (Slavin, 1996). The willingness to learn relates to whether or not learning is regarded as important in the group.

Findings

This section begins by introducing each course, and describing how and to what extent the students used their blogs. The four themes presented earlier will then be explored.

The students and their blogs

Students' levels of engagement in their blogs differed across the three courses and are, therefore, presented separately.

Course A

The course consisted of 222 students who were offered blogs on a voluntary basis in order to reflect individually on their studies. About 20% of the students activated their blogs. Among them, 30% used their blogs to reflect on their education, publishing at least four entries each. Media other than text, like video, sound or pictures, were rarely used. A few students made some comments, but no teachers did. A majority of the blogs could be described as text-based, private, and individual. Among the students who chose not to activate their blogs, the majority pointed out in the course evaluation that the blog had not been compulsory. Nina, one of the students interviewed, said that, "*The blog was voluntary and, therefore, easy to drop. You take the shortcuts you can.*" Some students, like Karin, presented more ethical arguments: "*You cannot use a blog to reflect during the practical training. It would be unethical to write about the pupils or the mentor.* Most of the informants who started to use their blogs gave up when no dialogue emerged. Eve explained that "*It was like writing into the empty void. It did not give me anything.*"

Course B

This course involved 57 students who were divided into smaller groups of 5–6 students each. They used their blogs to carry out one digital group seminar, discuss course literature and to complete a group assignment in which course content was transformed into classroom activities. In order to pass each blog assignment the students had to publish two blog entries each. All students participated in the text-based discussion by commenting on each others' blogs. The teachers contributed a short summarising comment at the end. The blogs could be described as text-based and holding thematic group discussions.

According to the course evaluation, 38% of the study participants claimed that they would not have written in their blogs if it had been voluntary. Lydia said that, "*During our first blog assignment, we wrote our two entries just to get through the discussion and pass*". The remaining

62% claimed that they would have written a blog even if the assignment had not been compulsory – as long as their teachers and/or fellow students gave their comments.

Course C

The 70 students in course C were divided into smaller groups of 6–7 students each. The students were supposed to use their blogs on a daily basis in order to document and reflect on their progress during their group work. Each group shared a blog, and the majority of the groups used different media, such as text in combination with sound and/or video and pictures in order to document the learning process. The blogs could be described as group blogs, holding documentation and reflection through different media. The informants spoke of how their teachers gave them constant feedback during the process by commenting in their blogs as well as by making face-to-face comments in class.

Students' age and attitudes

The informants were between 19 and 48 years old. The majority were 25 years or younger, while a few were 35 years or older. When the informants described their use of ICT, it became evident that younger students are generally more used to handling it. Alice explained: "*If you grow up using ICT you will learn as new concepts are introduced; if you just keep up, you will never fall behind.*" There are, of course, no sharp boundaries between these groups: there are older informants who are very interested in ICT, who could be described as early adopters, and who have acquired great ICT skills as adults.

However, this does not imply that young students per se are interested in ICT and always search for new ways of using computers. Nonetheless, there are some informants who were very interested in using ICT. Peter could be described as an early adopter: "*I am always curious, [and] usually first among my friends to try out new ways of using ICT, convincing them to try*" However, other students are very sceptic and put up as much resistance as possible. Sally pictured herself as a reactionary: "*I am very sceptical and resist as long as I can. I just use ICT when I am forced to write school assignments*". Most of the informants could, however, be placed somewhere in between these two extremes, i.e. they need time to adjust to new ideas before adopting them. Donna explained this as follows: "*I usually find new ICT application unnecessary. But my hesitation disappears when I learn how to use it.*." These three students are all young and have used ICT since their childhood, but they approach ICT very differently.

Most of the informants felt age was a crucial factor, but said that young people were pictured as pro-ICT even if they did not fit the picture. As Kevin explained, "*I am young, so I am supposed to join communities, blogs, MSN, etc. [But] I am just not interested.*" Marie agreed: "*Being only 20, I know that I am supposed to know how to use computers, but I have never been interested and I just do not know how computers work.*" Furthermore, some of the younger informants expected themselves to change as they age. As Joe explained, "*I think it is a process of maturity. Now that I am older, I am not so keen on trying all this new stuff*".

Affordances of blogs

All informants were familiar with blogs although this way of using blogs was a new way of understanding the concept. The narratives show that the majority of the informants found it difficult to relate blogs to an educational environment. Their prior understanding of blogs made it difficult for them to perceive any educational affordances. Karen expressed this as follows: "*People write blogs in order to expose themselves. When the teachers suggested that we would use blogs to reflect on serious stuff like our education I felt really provoked and I refused to write.*" Even some students that could be described as early adopters and very pro-ICT did not perceive any advantages. Julia, for example, asked the following question: "*I write almost every day about my life in my private blog. Why should I write a school blog? It sounds extremely boring. Who would ever be interested in reading about that?*" There were also students who appreciated the idea of digital discussions, but felt very sceptical towards blogs. Lisa stated this as follows: "*I thought the idea of documenting our process digitally was great, but why use a blog? Blogs are too hip and unserious to be used for educational purposes*".

The majority of the informants in courses B and C described undergoing a positive change in attitude towards blogs as they worked on them. Kitty had the following to say: "*I used the blog because it was compulsory, I was bloody sceptical, but it turned out to be lots of fun and very fruitful*". In their narratives, the informants discussed four affordances they perceived to have influenced their blogging. First among these were the affordances of documenting. All the informants in courses B and C pointed out the benefit of having discussions in writing, because they could read other groups' discussions and go back and read their own again. As Tracy explained, "*Spoken dialogues just vanish. You think that you will remember, but you don't*". One third of the students described the writing as a way of capturing their thoughts. Anne

put it as follows: "*I really need to put my ideas down in writing to structure my thoughts and to be aware of them.*"

Secondly, most of the students pointed out that blogs offered one time to read, to look for additional input, and reflect on one's writing before it was published.

The third affordances some of the informants perceived could be described as *talking space*, as Meg pointed out: "*There is often someone that takes over a face-to-face discussion. There is always room for everyone in a digital dialogue*". These affordances, offering time and space, encouraged some of the informants to mediate their thoughts in a way that they usually did not.

The forth affordance which most of the students agreed on was the possibility to receive comments from others. However, these affordances constituted a constraint at the same time. When blogs offer the opportunity for readers to comment, the expectation is created that teachers will be involved in the dialogue. Also, when the students did not get any comments, they became disappointed – which in turn affected their writing, As Eve explained, "*It is like when you talk to the teacher in the classroom and are just ignored. My activity in the blog definitely decreased*". A majority of the informants in courses A and B pointed out the lack of supportive feedback from the teachers. Because blogs afford communication, the students expected the teachers to take part in the dialogue.

When students described the affordances as well as the constraints in using blogs, they either compared digital with face-to-face dialogues, or described how they complemented each other. The following theme will, therefore, concern the idea of blending these two.

Experiences of blending

Except for four informants, all of the participants in courses B and C pointed out the affordance of blending digital and face-to-face dialogue. Firstly, students described themselves as preferring one way of communication. Grace presented the following argument: "*I prefer to write ... I am not as shy when I write in a blog as I am holding a face-to-face discussion in a seminar.* Kate spoke for the majority in her opinion: "*I prefer to talk in person. There is more information in a face-to-face meeting.*" Most informants were aware of these different qualities and the benefit of blending the two methods to communicate to meet different needs. Kate added that, "*Everyone has something to share; some like to do it face-to-face, while others prefer to write*".

Secondly, two thirds of the informants pointed out the advantage of having the possibility to use face-to-face sources while blogging. Tracy described: "*There are a lot of things happening when you discuss something using a group blog. I can read, think, talk to other students, ask my friends, and think again before I publish. It is a whole process*". The very blend of writing and discussion can complement each other, as Meg pointed out: "*When you write, you have time to think; when you meet, the dialogue is much faster and richer in associations*".

The third affordance, as the informants in course C pointed out, was the interaction between face-to-face activities and digital documentation and reflection. These students chose to work with their blogs in various ways. The groups that decided to discuss what should be documented in the blog before they published described the benefit of finding the essence of the face-to-face activities during the day, as Lucy explained: "*I learned a lot while we were transferring our face-to-face discussions to a blog entry. We had to reflect on our reflections made during the day*". To transform a long and associative face-to-face activity into a short and structured blog entry forced them to reflect on the learning process. The students who chose to use sound or pictures/video described the same process of reflection when they had to discuss what they had actually been doing in order to document the learning process. Indeed, the interaction and meta-reflection went the other way around as well – as Helen (course B) described: "*Reading our blog after the first assignment, we could see that it was just a mess. We sat down and discussed how to engage in digital dialogue*". The blogs made their messy discussion and their shortcomings visible, and they solved their problem in a rapid and evocative face-to-face discussion.

The social aspects of group

All of the informants referred to different groups, friends, their classmates, or broader society when they described how they used ICT in their private lives. All of the informants spoke of the social pressure to use ICT. Younger informants described this pressure as coming from their friends. Kate was an example of this: "*All my friends take on new ways of using ICT, and eventually they have dragged me into new communities. The group pressure is severe*". Older students are, however, more likely to be influenced by society, as Susan reflected: "*Neither I nor my friends use ICT to communicate. Maybe that is why they are my friends. ... but ICT is used everywhere and I feel forced to allow ICT into my life*". Thus, the motivation of using

ICT in their private lives is definitely related to the students' socio-cultural context.

The main motivation to use educational blogs has obviously been whether the blogs were compulsory or not. However, there were students who voluntarily started to blog, but who gave up when no confirmation was forthcoming from a social context. Social interaction is important, therefore. Rose, who did not use the blogs when they were voluntary (course A), did not have the same reasoning when she attended course C: "*Because it was a group activity, [in course C] I do not know if I had refused to blog even if it had been voluntary. Depending on what the rest of the group had chosen I would have followed their example.*" The teachers' expectations – or lack thereof – were also important to students' motivation. The course C informants, who continuously received feedback in their blogs as well as face-to-face, were the most active. Joe described it this way: "*Our teacher, who read and commented on our blog throughout our work, was our blog engine*".

Furthermore, the narratives showed that social interaction within the group is important when it comes to the kind of learning activity that will take place. Within a group of 6–7 students, of different ages and backgrounds, their knowledge was distributed. They represented a range of experience and skills, which provided positive conditions under which activities of distributed learning could take place. This process of learning was not present in all the student groups. Slavin (1995) discussed the importance of having a common goal within the group and, depending on that decision, the size of the groups' distributed knowledge may differ. The groups in courses B and C that made an (informal) decision to publish only two blog entries – just to pass the assignment – made little room to share their experiences. June expressed: "*When we all had published two entries, everything was just hanging in the air: all these questions that nobody cared to answer*". They did not take the opportunity to challenge each other in order to initiate a learning discussion. Most of their distributed knowledge never became visible or shared; the entries lacked engagement; and the zone of development decreased to a minimum – as did the learning process. Depending on the social interaction within the groups, their level of reflection and discussion varied, as Bertha pointed out: "*When I read the other groups' blogs, I could see that it depended on the group and the relations within the group how much dialogue and reflection would emerge*".

More activities took place in all course B and C groups where the informants described that they

had aimed for something more than just passing the assignment. These informants described how their activities in the blog had increased, how more and longer entries had been published, and how they had questioned and challenged each other. Thus, the importance of group interaction came out very clearly. These groups also described how they had discussed how to engage in their work and had reflected on their working process. In course C, for example, the students first discussed and then decided how to work with their documentation; therefore, they ended up using the media in very different ways in respect of mediating their work and learning processes.

Discussion

The first part of this discussion examines the abovementioned research questions concerning students' engagement in their blogs and their experience of the affordances of ICT and blended learning environments. Finally, age – as a characteristic that all students referred to as crucial to the use of ICT – is highlighted.

The students' engagement in their educational blogs varied among the groups. Like the students described by Divitini et Al. (2005), the majority of students in course A did not bother blogging, while those that had, soon gave them up. When the blogs were voluntary, individual and without teacher feedback, no expectations of the social context were created and, as described by Dysthe (2003), the students' motivation to engage in their blogs decreased Furthermore, the narratives showed that a majority of the informants found it difficult to transform blogs from the genre of personal blogs into educational blogs. Their prior understanding of *education* as situated in schools, in a physical context, prevented them from relating blogs to an environment in which formal learning could be situated. Therefore, as expressed by students in courses B and C, the social expectations of teachers seem to be important in helping students widen their experience and understanding of blogs.

The blogs in courses B and C became a group activity, and there were consequently social expectations from the group. These expectations, as described earlier, were closely related to the goals of the group, and the students seemed to adjust their engagement to fit these goals. As described by Slavin (1995), the importance of common goals is obvious in this study, although we need to add that these goals have to aim for social interaction in order to motivate the students to engage in their blogs. If they merely aim to pass the assignments, their common goal will instead constitute an obstacle to the

learning process. Informants in courses B and C who described their groups' common goals as related to "learning activities" engaged in the blogs long enough to widen their understanding of the medium from being something private to being an environment for learning. Learning is situated and mediated; to engage in educational blogs, therefore, we need to broaden our perspectives of learning as something that is situated in schools and mediated by teachers face-to-face to a wider concept, that includes learning being situated in a virtual context and mediated through artefacts like written text, sound, pictures and video.

Students' understanding of educational blogs, social expectations, interaction with teachers and social activities within their groups seemed to influence their engagement in their blogs.

As described earlier, the affordances of blogs for learning were not obvious to the students at the time the blogs were introduced, although this became evident to the students in those groups that had engaged in their blogs. Seeing blogs as a creative "middle space", to use Oravec's (2003) term, was shown to be highly student-determined. The design of blending face-to-face and virtual learning activities was created by the students, individually as well as in groups. Both the students' ability to perceive blog affordances, and also the affordances of the blogs, developed during the course. In this way both the students' abilities and the affordances of the blogs were created in relation to one other (Greeno 1994). The affordances of blending face-to-face and virtual activities, as described by the informants, correspond to Garison and Kanukas' (2004) definition of *blended learning* as a design of an integration of face-to-face and online learning experiences. The informants pointed out affordances of deriving advantages from both environments to support different needs they had of mediating their thoughts and reflection in order to become a part of the distributed knowledge within their groups. Furthermore, they described how their own learning had profited from the reflective process in which they had transferred their face-to-face activities to their blogs, mediated through different artefacts.

These affordances described by the informants, in course B in general and in course C in particular, became evident to the students during their work. As stated earlier, besides their prior understanding of blogs and their social activities within the groups, there were no other characteristics that could shed further light on the informants' abilities. For example, their age did not seem to play a crucial role in their engagement in blogs.

However, there is a rather widespread understanding that young people, by definition, are interested in ICT. Prensky (2001) describes these "digital natives" rather homogeneously as having grown up using ICT. This homogeneity could be considered an overstatement. As stated earlier, young students can be early adopters of as well as reactionaries to ICT; they also have the same understanding as people in older age groups of school as being a physical face-to-face context, and the same struggle as their older counterparts in transforming blog genres from a private to an educational environment. Irrespective of age, therefore, the informants expressed a wish that teachers clarify the purpose and advantage of using blogs for reflection, documentation and dialogue. Also irrespective of matter age, they wanted teachers to read their blogs and give feedback on them, confirming that they were on the right track and using the blogs as intended. Students needed help in constructing and defining educational blogs as a genre, and blogging as a learning activity. Furthermore, there is a need to discus how open educational blogs should be. This is an ethical matter as well as a question of concern in respect of for students', teachers' and pupils' privacy and security.

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