

USING BLOGS TO ENHANCE A DIALOGICAL APPROACH TO LEARNING IN HIGHER EDUCATION

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Abstract

This paper focuses on how the use of blogs can be seen to enhance a dialogical approach to learning in a higher education setting. Blogs have been in use in educational settings for several years (see, for example, Williams & Jacobs, 2004). Sixty-three students participated in the practice of writing blogs open for all students to read as assignments in which students were also expected to write comments in the blogs of other students. The blogs were analysed through a transactional approach to dialogue using the ICE (Ideas, Connections, and Extension) model of Fostaty Young and Wilson, (2000) and Fostaty Young (2005) as a way of assessing students learning. The preliminary analysis indicates that students initially primarily express ideas in their comments, towards an increased use of connections. This is discussed in the paper as an indication that the use of blogs support and enhance a dialogical approach to learning, even though their use seems to differ between different assignments and study groups.

Introduction

Over the last five years, there has been an increased use of technology in higher education in Sweden, and technology enhanced net-based ventures are more and more prominent in higher education practices (Hrastinski, 2007; Olofsson & Lindberg, 2007). Among other technologies, this development has meant an increased use of social software for learning practice (Klamma et al., 2007; Parker & Chao, 2007) from the individual towards the community and from individual learning towards collaborative learning (Balacheff, Ludvigsen, de Jong, Lazonder, & Barnes, 2009; Beldarrain, 2006; Hakkarainen, 2009; Jonassen & Land, 2000; Sorensen & Takle, 2002). This is one point of departure for this paper, and the question that the paper seeks to elaborate upon should be understood in relation to this particular development. How can more dialogical and reflective practices within technology enhanced higher education be designed, and how could learning within these practices be understood?

But first, a short background on educational technologies will be provided, followed by a short discussion on technology enhanced learning and e-learning. Thereafter a more specific account on social software in higher education will be

provided, and in particular research on the technology which is focused in this paper — blogs. This is followed by aim, method, and analysis, ending the paper in a short discussion.

Technology and Higher Education

Research concerning technology-enhanced learning (TEL) (Kukulska-Hulme & Jones, in press) and the use of educational technology (Januszewski & Molenda, 2008) is growing rapidly (Balacheff et al., 2009; Beetham & Sharpe, 2007; Lindberg & Olofsson, 2010). Czerniewicz (2008) describes the field of educational technology as an emergent field in a rapidly changing context in which professionals and researchers have both overlapping and mismatching knowledge and language.

This does not mean that the field has a large body of research describing generic solutions to how educational technologies ought to be designed. It is rather that in discussing innovations in teaching, such as the use of e-learning, adoptions of learning technologies are claimed to have to be tailored to specific contexts (Schneckenberg, 2010). Success factors for e-learning delivery seems also to be more than a pedagogical issue, ranging over all issues of higher education from staffing issues, delivery models, training issues, to leadership issues (McPherson & Nunes, 2008). Mayadas, Bourne, and Bacsich (2009) claim that online education is creating new opportunities for students. Since the global competition for students will likely increase, an important question is what practices will this spawn.

Models and approaches for integrating technology into teaching and learning in higher education do exist. Wang (2008) provides a generic model for integrating ICT into teaching and learning, highlighting in the model a basis in both constructivist models of learning and the potential of designing for interactivity. But as Der-Thanq, Hung, and Wang (2007) note, there is a lack of learning design tools for nontraditional features of learning such as collaboration. Resta and Laferriere (2007) conclude in their review that many perspectives contribute to the understanding of how collaborative learning can be supported by technology. Dillenbourgh (2008) provides one account on how such practices could be orchestrated by the teacher, integrating technologies in existing educational ecosystems rather than expecting them to provide altogether new practices. Laurillard (2008) support such an approach, describing a bottom-up approach to use learning technologies in educational settings. Mor and Winters (2007) review different design approaches to learning, pointing to the common constraints of all approaches being the learner.

The potential of including blogs as learning technologies into the design of higher education settings to be such spaces for collaboration creating community and at the same time provide for the individual learner will be further described in the next section.

Blogs in Higher Education

Blogs have been in use in educational settings for several years (Sim & Hew, 2010; Williams & Jacobs, 2004). The use of technologies such as blogs, wikis and simulations in online higher education is increasing (Conole, 2010; Laurillard, 2008b). Higdon and Topaz (2009) describe blogs and wikis as a software adaptation to just-in-time teaching. Blogs have been described as “simple content management tools enabling non-experts to build easily updatable web diaries or online journals” that are “networked between several users who post thoughts that often focus upon a common theme” (Kamel Boulos & Wheeler, 2007, p. 5). They are usually located in a shared online space, with an intention to facilitate the learners’ reflective thinking (Sim & Hew, 2010). Hatzipanagos and Warburton (2009) claim that these practices have two functions, a meta-reflective function and reflections concerning how other learners’ comments related to one’s own posting in the blog (cf. Augustsson, 2010). Blogs are designed spaces in an educational setting, affording students possibilities for dialogue with teachers and peers. Looking at the role of social software in education, Minocha (2009), reports that blogs support active learning and a reflective practice. Davoli, Monari, and Severinson Eklundh (2009) focus on how collaboration in web-learning platforms support writing as a collaborative process. They found that students pay more attention to the way they write their postings. Hall and Davidsson (2007) confirm that blogs are successful tools for creating supportive learning environments for reflective learning. But blogging can also be considered a practice in itself, as Schmidt (2007) suggests, guided by structural aspects of rules, relations, and code. There might also be a difference in the way blogs are used when they appear in formal or in informal contexts (Hammond, 2006).

Given these aspects of the use of blogs in higher education settings, we seem to need to further study how the design of learning or educational technologies can support learning. Also pointed to is the need to further investigate how collaborative practices can be designed to enhance a dialogical approach and support student learning. In this paper one such design will be presented where the blogs are intended to provide student a space for collaboration, dialogue, and learning.

Aim

The aim of this paper is to further investigate the use of blogs in higher education settings where they are intended to enhance a dialogical approach to learning.

Methodological Considerations

In this paper, the use of blogs in higher education is investigated by analyzing how 63 students in a higher education program used blogs as a tool for learning

within the program. This preliminary analysis is done considering the initial postings in blogs written by each student, and the subsequent comments as one unit of analysis for each group of students forming a study group. In all there were eight study groups consisting of five to ten students, each group producing in average about eight pages of written text of postings and comments, posted on four different assignments and themes. The analysis of the blogs as a design intended to enhance dialogue is guided by a transactional approach, and the use of the ICE framework for assessing the potential of the blogs to enhance the students learning through technology. These two dimensions are further elaborated upon below.

A Transactional Approach

Dewey and Bentley (1949/1960) distinguish between interactional and transactional approaches to human action. Whilst interactional approaches build on a dualistic world-view, transactional approaches depart from a world view where human action is something that cannot be separated from its surrounding (Altman & Rogoff, 1991; Bakhtin, 1935/1981; Dewey & Bentley, 1949/1960; Vygotsky, 1934/1987). This position emphasizes the necessary relationship between man and environment by regarding this as a dynamic whole where conditions in various settings and motives of human actions are influenced by cultural, ecological, historical and social aspects (Jaldemark, 2010).

In a transactional approach educational setting is a concept for understanding participation in technology-supported education. An educational setting is about the circumstances, locations, and time in which education occurs or develops which binds education to the totality of its surrounding conditions. Online participation in an educational setting relates students and teachers to each other and to actions such as communication as well as to the tools that mediate their actions (Jaldemark, 2010; Vygotsky, 1978). Through the collaborative feature of the educational setting students are supposed to learn to perform independently. Moreover, from a transactional approach it is possible to discuss the actions performed in educational settings in terms of students participation in various dialogues (Bakhtin, 1935/1981; Dysthe, 2002a).

Dewey (1916) discusses the importance of communication by emphasizing its role in the continuing existence of society. He argued that communication is the way in which agents “come to possess things in common” (Dewey, 1916, p. 5). Following the transactional approach discussed by Dewey and Bentley (1949/1960), Bakhtin (1935/1981, 1953/1986) distinguishes between the concepts of communication and language. A word or a sentence is “a unit of *language*, as distinct from the *utterance* as unit of speech communication” (Bakhtin, 1953/1986, p. 73). Utterances are language in action and in the approach used in this paper utterances could be online documents such as a study-guide, written entries in blogs, chats or computer-conferences, or spoken utterances from a video-conference, or various other tool-mediated resources. Bakhtin (1935/1981, 1953/1986) discussed communication in terms of being a dialogical process.

Successful communication assumes that shared meaning is possible. Therefore, response and understanding condition each other while dialectically merge in a communicative process. In other words, communication is about making meaning. In this sense, meaning making is “a bridge between the speaker and the listener, the writer and the reader” (Dysthe, 2002a, p. 341). Therefore, from a transactional approach participation in commenting on postings in a blog written by fellow students is about developing a shared meaning in an emerging dialogue. In the analysis the dialogical aspect of the students comments have been considered to be either a univocal or dialogical. Univocal comments have only one voice, consisting primarily of a confirmation that the reader has read the text. Dialogical comments are those listening for the other person, wanting to know more, asking questions or questioning the content. By making this distinction the comments can be seen to display different qualities in the dialogue as a meaning making process.

The ICE Model

To analyse the potential for enhancing the students learning of the course content, the dialogical approach was combined with the use of the ICE (Ideas, Connections, and Extension) three level classification model (Fostaty Young, 2005; Fostaty Young & Wilson, 2000). ICE is a process orientated approach to content assessment said to relate students to the students' own progress and not to standards and norms. In the ICE model, *Ideas* refers to the first step of describing the fundamentals, facts or information in question. The second step, *Connections* refers to the established relationships between fundamentals, to the way the ideas are connected. Connections relate back to previous knowledge, associating what is new to things already known. The final step *Extensions*, where ideas and connections are internalised to a degree where they help to answer further questions, provides for a view of the world. In the analysis, ideas are demonstrated in the blogs as basic facts, definitions, details and elementary concepts; connections are shown when students demonstrate how basic concepts are related or when students make connections between what was learned and what they already knew. In the analysis, extensions are considered when students use new learning in novel ways, what this means or how this shapes their view of the world (Fostaty Young & Wilson, 2000).

Analysis and Discussion

The task of posting blog utterances was an integrated part of the educational design. Each course module started with a blog assignment to scaffold students' reflective thinking. Before the programme started the course-administrator had assigned the student to different study-groups. These groups were an important aspect in the design of the blog assignments. The assignments were extensively described in the study guide and in the Learning Management System and each had a deadline. Students were expected to apply reference techniques and develop

their skills in academic writing. All in all, the design of the blog assignments intended to give the student a space for dialogue and reflection.

The analysis of the students' comments will be presented first as a whole. In Table 1, the total number of comments in the two dimensions dialogue and learning are given.

Table 1: Analysis of the Comments from the Whole Group of Students

All groups	Ideas	Connections	Extensions	Total
Univocal	243	206		449
Dialogical	15	22	1	38
Total	258	228	1	487

As can be seen in Table 1, only 38 out of a total of 487 comments have been interpreted to be dialogical. As can also be seen, only one comment has been interpreted as being a sign of the students showing extensions. The remaining part of the analysis will be presented assignment by assignment, providing a brief description of each task to give the most interesting results a context.

Assignment 1

In module 1 the students were supposed to start their blog and post a first utterance. That posting should be around 500 words and include a synthesis of literature, questions that they needed answers on, and a general reflection of the content of the module. The postings were linked to reading of compulsory literature. Moreover, the students were supposed to comment on other students' postings. According to the instructions they also should reflect on three other students postings; these reflections should not fall below 100 words. The teacher posted a general comment to his/her study-groups that should apply to all blogs in the study group. This blog was the introductory assignment of the programme and was supposed to be written before the first introductory meeting at campus.

Table 2 shows the analysis for the whole group in relation to the two most different study groups.

Table 2: Analysis of Comments on Assignment 1,
whole group and study group 11 and study group 10

All groups	Ideas	Connections	Extensions	Total
Univocal	70%	20.5%		90.5%
Dialogical	6%	4%		10%
Total	76%	24.5%		100.5%

Study Group 11	Ideas	Connections	Extension	Total
Univocal	44%	44%		88%
Dialogical	4%	8%		12%
Total	48%	52%		100%

Study Group 10	Ideas	Connections	Extension	Total
Univocal	94%			94%
Dialogical	6%			6%
Total	100%			100%

In Table 2, study group 11 and study group 10 have different patterns in their communication. The comments of study group 10 are all interpreted as showing Ideas, and only a few being dialogical. The comments of study group 11 on the other hand are interpreted to show an equal amount of ideas and connections, and almost twice as many comments are dialogical.

Assignment 2

The blog assignment in the second course module embraced reading of literature and to post a 500-word blog entry that discussed differences and similarities in the literature. They were encouraged to discuss various applications to exemplify. This blog entry was a preparation for the second assignment in this module; a compulsory seminar, therefore, the teachers were only supposed to read the postings. Students were recommended to comment on each others blog entries.

Table 3 show the analysis of the comments on the second blog posting for all the students.

Table 3: Analysis of Comments on Assignment 2

All groups	Ideas	Connections	Extensions	Total
Univocal	14	8		22
Dialogical	1	1		2
Total	15	9		24

Since there are only 24 comments on the postings on this assignment, this will not be further elaborated on. This assignment was for some unknown reason not completed by all students or groups — perhaps focus came to be on the compulsory seminar.

Assignment 3

In the third course module students were supposed to prepare a mind-map over their educational background. This mind map was later used as a starting point for writing an entry comprising of 500 words. As in the first assignment students should comment on three other group-members entries. These comments should deal with differences and similarities in their educational background.

Table 4 showed the analysis of the comments on assignment three for the whole group of students.

Table 4: Analysis of Comments on Assignment 3, whole group

All groups	Ideas	Connections	Extensions	Total
Univocal	15%	81%		96%
Dialogical		4%		4%
Total	15%	85%		100%

As can be seen in Table 4, the analysis shows a large number of comments making connections between the content in the course and previous knowledge. The reason for this is probably the nature of this assignment, in which students were to concentrate their comment on similarities and differences in their own blog posting and the blog they were commenting on. But there are interesting differences in the pattern of communication between the study groups. Table 5 shows the analysis of the comments in study group 9 and study group 12.

Table 5: Analysis of Comments on Assignment 3, study group 9 and 12

Study group 9	Ideas	Connections	Extensions	Total
Univocal	4%	96%		100%
Dialogical				
Total	4%	96%		100%

Study group 12	Ideas	Connections	Extensions	Total
Univocal	33%	54%		87%
Dialogical		12.5%		12.5%
Total	33%	66.5%		99.5%

The different patterns for study group 9 and study group 12 seems to indicate that the study group could develop a practice that differs from that which it is intended or designed for, providing students with a space where the assignment can provide both more dialogue and less connections.

Assignment 4

The fourth course module had a similar design as the first and third assignment, 500-word entry followed by comments on three other blogs within the study group. The entry should deal with a synthesis of compulsory reading, questions raised during reading, and reflections on their own experiences of the actual topic.

Table 6 shows the analysis of the comments on assignment 4 for the whole group.

Table 6: Analysis of Comments on Assignment 4, whole group

All groups	Ideas	Connections	Extension	Total
Univocal	65%	24.5%		89.5%
Dialogical	3%	7%		10.5%
Total	68%	31.5%		99.5%

As can be seen in relation to Table 1, the table shows a similar pattern in the communication on a level of all groups. But there are differences in patterns of the study groups, as can be seen in the analysis of the comments in the different study groups. Table 7 shows the patterns for study groups 6, 7, and 10.

Table 7: Analysis of Comments on Assignment 4, study groups 6, 7, and 10

Study group 6	Ideas	Connections	Extensions	Total
Univocal	35%	41%		76%
Dialogical		18%	6%	24%
Total	35%	59%	6%	100%

Study group 7	Ideas	Connections	Extensions	Total
Univocal	42%	42%		84%
Dialogical	8%	8%		16%
Total	50%	50%		100%

Study group 10	Ideas	Connections	Extensions	Total
Univocal	89%			89%
Dialogical	11%			11%
Total	100%			100%

As can be seen in Table 7, there are rather different patterns emerging in the analysis. Interestingly, the assignment can provide the student with opportunities to both make connections and provide for dialogue, and to focus on ideas in a more univocal way.

Conclusion

The preliminary analysis that is briefly provided in this paper show the difficulty in designing for certain dialogical and learning practices. For the teacher wanting to orchestrate the students learning, it seems not to be enough to provide rather strong guidance within study guides and in assignments. In the specific practice of each study group, there seems to emerge different ways to meet the requirements. The initial concern for designing for enhanced dialogue and learning seems more problematic when the analysis is broken down into specific contexts, such as the social practice of a single study group. The practice of writing blogs needs to be further studied to better understand how assignments can be designed to enhance a dialogical approach to learning, and to further the students' possibilities to go beyond ideas and connections to include an extended understanding.

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