

Supporting Transparency between Students

Christian Dalsgaard¹

¹ Aarhus University/Department of Information and Media Studies, Aarhus, Denmark

Abstract—The paper presents the results of a case study that explores the potentials of weblogs and social bookmarking to support transparency in a university course. In the course, groups of students used weblogs and social bookmarking in their work. The objective of the case was to empower students by providing them with tools that would be visible to the other students in the course, thus, making students' ideas, thoughts and questions visible to the other students in the course. The paper concludes that use of digital media for transparency can support empowerment of students and inspiration among students in a course, but that the challenge is to create a balance between personal tools and tools for collaborative group work that are also suitable for transparency between students..

Index Terms—Empowerment, learning, social networks, transparency.

I. INTRODUCTION

Often, the educational potentials of social software or Web 2.0 are related to collaboration. In this paper, I explore a different potential of social software / Web 2.0 in education: the potential to support transparency between students. On basis of a case study, the paper discusses how the social software tools, weblogs and social bookmarking, can be used to support transparency between university students following the same course. The case study explores students' use of weblogs and social bookmarks in a university course. The basis of the case was to empower students by providing them with tools for individual use and social interaction. The main idea was that these tools would also be visible to the other students in the course. The purpose was to make students' ideas, thoughts and questions more visible in the course – both to other students and to the teacher. The paper presents the results of the case study; how did students use the tools, and what were their own experiences? How did students use each others' resources: were students inspired by other students, did they get ideas from other students, etc.? The purpose of the paper is to explore potentials of digital media to support transparency and empowerment of students.

II. EMPOWERMENT THROUGH TRANSPARENCY

There is an ongoing discussion on the learning potentials of different kinds of social relations. The discussion includes different concepts to describe social relations: groups, communities, collectives, connections and networks (Dron & Anderson 2007; Downes 2007; Wenger et al. 2005; Anderson 2008; Ryberg & Larsen 2008; Jones 2004; Jones et al. 2006; Siemens 2005). As Dron & Anderson (2007) state, research and practice of e-learning has primarily focused on groups. They describe groups as "individuals who see themselves as part of that group". Social networks have challenged the educational

focus on groups. Jones (2004; Jones et al., 2006) uses the concept of networked learning and stresses the importance of facilitating "connections between learners, learners and tutors, and between learners and the resources they make use of in their learning" (Jones et al. 2006, p. 90). Connections between people in social networks can be of different kinds. Ryberg & Larsen (2008) argue that it is important to clarify the kind of connection and to clarify, how these kinds of connections support learning. This paper will explore the learning potentials of the kind of weak ties within social networks that supports transparency.

The concept of transparency describes students' and teachers' insight into each other's work, thoughts and ideas. Transparency implies that the doings of students and teachers are made visible within a learning environment. Thus, students' activities are made transparent. For example, students and teachers could be made aware of each other's interests, thoughts, concerns, ideas, writings, references, and assignments. In that sense, the objective of developing transparency is to enable students and teachers to follow work of the other participants in a learning environment. Elsewhere, I have argued that transparency is a unique quality of digital media, and that digital media have unique potentials in relation to transparency (Dalsgaard, 2008; Dalsgaard & Paulsen, forthcoming). The potential is primarily related to social networks. There are numerous kinds of online social networks. Most common are social networking sites such as Facebook or Myspace. Networks also develop from relations between weblogs. A final example is media sharing services such as YouTube or flickr, which build social networks around the media content.

An important feature of all social networks is that they always have the individual as the starting point. The individual is represented by his/her own site or profile, which the individual develops and modifies. Other people in the network can view these sites or profiles, which means that activities within a network are made transparent. A central form of communication in social networks is to view and follow activities on the websites or profiles of your relations or "friends" in the network. In social networks, people subscribe to websites or profiles of other people (often using RSS feeds). This creates a kind of indirect or "passive" form of communication and sharing. It means that communication in social networks differs from communication in discussion forums. Whereas people in discussion forums send and reply to messages, communication in social networks is often a matter of updating your profile, adding pictures, texts, etc. The core of this kind of communication is people's own work and personal sites or profiles, which are made visible to others. Because social networks are developed, when personal websites or profiles are connected, social networks are always individual. Each individual builds a network of personal relations.

In summary, communication within social networks is, to a large extent, a matter of transparency. Transparency is relevant within education and brings new opportunities for communication within a class; especially in courses where students are working on related projects or assignments. Students in a course might not be aware of each other's work, activities and thoughts. However, it is most likely that students can make use of each other's resources. It would be relevant to make available students' understandings of texts, their notes, references, ideas, opinions, etc. to the entire class. If students are made aware of the activities of fellow students, they might make use of each other.

The objective of creating transparency between students and, thus, making them aware of each other is to empower students. The assumption behind the case study was that students are empowered by making them more present and visible in the course. Transparency should serve the purpose of supporting and encouraging participation by making student opinions and thoughts available. This was the starting point for the case study.

III. CASE STUDY

A. Pedagogical approach

The course in the case study was organized on basis of a socio-cultural approach. The pedagogical approach derived from socio-cultural theory is grounded in problem-oriented and self-governed learning activities. Learning is an active process that takes place through problem-oriented activities, in which students are directed at solving a problem. It is important that the students govern their own problem-oriented activities. Socio-cultural theory also stresses that individual activities are *always* situated in a collective practice (Vygotsky, 1978; Brown, Collins & Duguid, 1989), which means that activities are collective (Leont'ev 1978; Engeström 1987).

Social relations such as dialogue and collaboration are central to learning in a socio-cultural approach. However, collective activity does not only take place within direct forms of communication as in dialogue and collaboration. Relations between individuals in collective activity can be of such a sort that the individual is not aware of the activities of other people, although their activities are of importance to the individual. This is the socio-cultural argument for the importance of transparency. It is important to support consciousness and awareness between students in a learning environment. Consciousness and awareness support the individual's reflection on his/her own activities in relation to the activities of others. This is the pedagogical argument for the case study's focus on transparency. It means that the objective of the case study is not community-building or collaboration, but increased transparency between students.

B. Background

The purpose of the study was to explore use of social software tools to support transparency. The study is based on logs of students' weblogs and social bookmarks and students' questionnaires. The case study is based on a course that I taught in the fall of 2008 at the Department of Information and Media Studies, Aarhus University, Denmark. The course *Knowledge sharing, IT and organization* was a 15 ECTS master's course. There were

20 participants in the course, which was organized in five half-day face-to-face seminars. The seminars were organized as a mix of presentations from the teacher, group discussions and discussion in class.

The objective of the case study was to experiment with use of digital media to support increased awareness between student activities. Students were divided into seven groups (of 2-3 students). The course employed three kinds of digital tools: weblogs, social bookmarking and a Learning Management System (LMS) called AULA. The main objective of using these tools was transparency; to make students' thoughts, opinions, ideas, and questions more visible to other students and to the teacher. Transparency served two purposes. First of all, the intention was to make the work and thoughts of every student visible in order to inspire the other students. Secondly, the purpose was to empower the students by increasing their participation in the course.

The primary and most used tool was weblogs. Each group was asked to set up a weblog for their group work. The weblogs were the main tools for transparency in the course. Between the seminars, the groups would collaborate on two assignments. Prior to the seminars, each group should develop principles on basis of the literature, and they should pose questions to the teacher regarding the literature. Students used the weblogs to work on the assignments, and to publish their principles and questions. The writings on the students' weblogs were used as a basis for the teacher's presentation and for discussions at the seminar. Each student also set up a social bookmarking account (using Delicious). Social bookmarks were primarily used to increase transparency between students by making their bookmarks available to fellow students. However, the teacher also had a social bookmarking account that the students could subscribe to. Each student used a feed reader to subscribe to RSS feeds from each other's weblogs and social bookmarks. In that way, the writings and bookmarks in the class were made transparent to all students. Finally, the LMS of the university was used by students to share abstracts for their final assignments with fellow students. The LMS was used instead of weblogs for this purpose, because the abstracts of the students could not be published on the web (due to company sensitive information).

C. Findings

The study is based on the following weblogs (all weblogs are in Danish – the first seven weblogs are group weblogs, and the last three are individual weblogs):

<http://vio2008gr1.blogspot.com/>
<http://vioe08-gruppe2.blogspot.com/>
<http://vio2008-grp3.blogspot.com/> (removed)
<http://vidensdelinggruppe4.blogspot.com/>
<http://mitgruppe5.wordpress.com/>
<http://vid3n.blogspot.com/>
<http://vidensdelingogit.blogspot.com/>
<http://raminjalili.blogspot.com/>
<http://mohammadsblog08.blogspot.com/>
<http://www.braad-poulsen.dk/wp/>

During the course (between September 22, 2008 and November 26, 2008), the seven groups wrote 79 posts on their weblogs (34 of the posts were made by one group).

Posts on the group weblogs differed in kind. Most of the posts were directly related to the assignments given prior to the seminars, and there were not many posts on other issues. However, at least seven different kinds of posts were identified:

- Answers to the assignments
- Summaries of curriculum texts
- Communication and coordination between group members
- Comments on curriculum texts
- Subject-related recommendations and comments
- Links to subject-related texts and articles
- Summaries/notes from discussions on the seminars

The first three kinds dominate the weblogs, whereas posts of the last four kinds were rare. Use of weblogs did not form a communicative community among the students. This is evident from the use of comments on the weblogs. Only 18 comments were posted during the course. All of the comments were written by fellow group members. No comments were made by other groups or by the teacher. Instead, the groups used the comments to engage in dialogue, primarily concerning coordination of group work.

Social bookmarks were used differently than weblogs. Although all students set up social bookmarking accounts, only 12 students used bookmarks actively. In the four months period from September 23, 2008 to January 12, 2009, the 12 students bookmarked 110 websites. The bookmarked websites ranged from course-related websites to personal websites not related to the course. The following kinds of bookmarks can be identified:

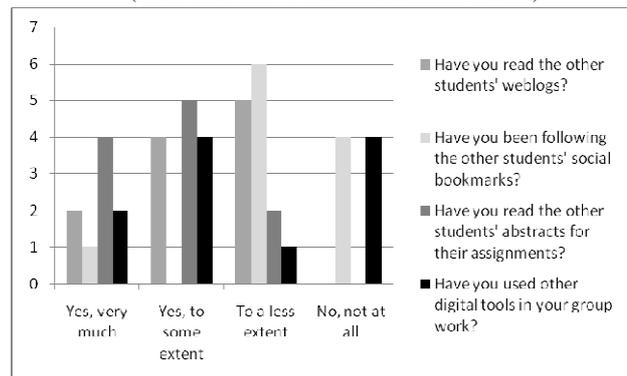
- Websites
- Academic articles
- Weblogs (related to course)
- Researcher’s websites
- Academic institutions

The bookmarks of the students are dominated by course-related sites. However, it is obvious that the students used social bookmarking first and foremost as a personal tool. Several bookmarks are related to specific interests of the individual students rather than to the course. Use of social bookmarking as a personal tool is also evident from the fact that three of the students have continued using social bookmarks after the course. The three students have bookmarked 27 websites in the period between January 13 and February 27, 2009.

At the end of the course, students were given a questionnaire. 11 of 20 students answered the questionnaire. In the questionnaire students were asked to rank their use of weblogs, social bookmarks, AULA, and other digital tools on a scale from “Yes, very much” to “No, not at all”. Table 1 shows the answers of the students.

A majority of the students (6) read the other students’ weblogs “very much” or “to some extent”, whereas a majority (10) followed the bookmarks of other students “to a less extent” or “not at all”. A majority (9) read the abstracts of other students “very much” or “to some extent”.

TABLE I.
ANSWERS TO THE QUESTIONNAIRE
(THE Y-AXIS SHOWS THE NUMBER OF STUDENTS)



In the questionnaire, the students were also asked to elaborate on their use of digital media. They were asked to answer the following questions in free text:

- What were your experiences using weblogs – what did you gain from it?
- What were your experiences using social bookmarks – what did you gain from it?
- What have you gained from reading the abstracts of your fellow students?
- What other digital tools have you used in your group work – and what have you gained from that?

Students’ experiences with weblogs varied. A majority of the responses were positive and indicated that weblogs are suitable tools for sharing writings in and between groups. However, several students stated that weblogs are not suitable for group work. In other words, the weblog did not support students’ *collaborative* work on developing principles and posing questions. Some students suggested a wiki instead.

As it is evident from Table 1, students scarcely used social bookmarks to follow bookmarks of fellow students. However, many students answered that they used their own social bookmarks, and that they were still in a process of learning to use them properly. Some students have continued using social bookmarking after the course.

The final way of supporting transparency between students was to make the abstracts for their assignments available to each other. As Table 1 shows, most students read abstracts of fellow students. Most students wrote in the questionnaire that the abstracts were an inspiration to their own assignments. Students state that they got insight into the work and thoughts of other students, and that reading other abstracts gave them new perspectives and other view points.

Especially in light of students’ expressed need for collaborative tools, it was interesting to see what other digital tools the students utilized. Approximately half the students (see Table 1) used other tools “very much” or “to some extent”. Students state that they have used Skype, groupware and e-mail to support their group work.

IV. CONCLUSION

The case study showed that it is possible to make students visible through their writings and questions,

primarily through weblogs and, to some extent, through social bookmarking. Students' thoughts, opinions and understandings were brought into class. Because weblogs are created and managed by the students themselves, they gain ownership of the weblog. This means that they decide how to use it. This kind of ownership is more difficult to achieve with a discussion forum created by a teacher within an institutional LMS. This personal nature of weblogs might be the reason why students also wrote posts that did not directly relate to the assignments. In that sense, weblogs encourage empowerment, because they are open to individual or personal writings of students.

However, the study showed that the personal writings on the weblogs were limited. Whereas the weblogs were used for group work and primarily for writings of direct relevance to the entire class, it was obvious that the students used social bookmarking first and foremost as a personal tool. From the point of view of transparency, the problem with the employment of social bookmarking in the case study was that they were not read very much by other students. Also, students' answers in the questionnaire indicate that a weblog was not the most suitable tool to support their collaborative group work. Although the weblogs supported transparency, they did not fully support the collaborative work of the students.

The case study has shown that use of digital media for transparency can support empowerment of students and inspiration among students in a course. First of all, students used the writings of fellow students for inspiration. Secondly, students were made more visible in the course through their weblogs. This meant that they had influence on the content of the seminars.

However, the conclusions of the case study also pose a challenge to support of transparency and empowerment. The challenge is to create a balance between personal tools and tools for collaborative group work that are also suitable for transparency between students.

REFERENCES

- [1] Anderson, T. (2008) Networks vs. Groups in Higher education. Weblog post: <http://terrya.edublogs.org/2008/03/17/networks-versus-groups-in-higher-education/#more-90>.
- [2] Brown, J. S., Collins, A., & Duguid, P. (1989). Situated Cognition and the Culture of Learning. *Educational Researcher*, 18(1), 32-42.
- [3] Dalsgaard, Christian (2008). Social networking sites: Transparency in online education. *EUNIS 2008 proceedings*, Århus, June 24 - 27, 2008.
- [4] Dalsgaard, Christian & Paulsen, Morten Flate (forthcoming). Transparency in cooperative online education, *The International Review of Research in Open and Distance Learning*.
- [5] Downes, S. (2007). Learning Networks in Practice. *Emerging Technologies for Learning*, 2, 19-27. British Educational Communications and Technology Agency. <http://ijklo.org/Volume3/IJKLOv3p029-044Downes.pdf>.
- [6] Dron, J., & Anderson, T. (2007). Collectives, Networks and Groups in Social Software for E-Learning. *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* Quebec. www.editlib.org/index.cfm/files/paper_26726.pdf.
- [7] Engeström, Y. (1987). *Learning by Expanding*. Orienta-Konsultit Oy.
- [8] Jones, C. (2004). The conditions of learning in networks. *Kaleidoscope CSCL SIG*. Lausanne.
- [9] Jones, C., Ferreday, D., & Hodgson, V. (2006). Networked learning a relational approach – weak and strong ties. *Proceedings of the Networked Learning Conference 2006*.
- [10] Leont'ev, A. N. (1978). *Activity, Consciousness, and Personality*. <http://www.marxists.org/archive/leontev/works/1978/index.htm>.
- [11] Ryberg, T., & Larsen, M. C. (2008). Networked identities: understanding relationships between strong and weak ties in networked environments. *Journal of Computer Assisted Learning*, 24, 103-115.
- [12] Vygotsky, L. S. (1978). *Mind in Society*. Harvard University Press.
- [13] Wenger, E., White, N., Smith, J. D., & Rowe, K. (2005). Technology for communities. CEFRIO book chapter. <http://www.ewenger.com/pub/index.htm>.

AUTHORS

Christian Dalsgaard is a postdoctoral researcher at the Department of Information and Media Studies, Aarhus University, Denmark (e-mail: cnd@imv.au.dk).

Manuscript received 11 May 2009.

Published as submitted by the author.