

ABSTRACT

Title: Distributed Problem-Based Learning: Studies of a Pedagogical Model in Practice

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Different teaching and learning strategies such as problem-based learning have been proposed for greater success with online learning in higher education. At the same time, the significance of social contexts and culture to students' learning with new technologies has attracted growing attention. Based on a formative evaluation of online courses, this thesis focuses on actions originating in practice. Four independent studies use research approaches developed from a theoretical position that highlights the cultural and social dimension of learning.

The first study focuses on the use of synchronous and asynchronous communication in online courses using problem-based learning and it supports the preference of students to meet synchronously, enabling them to check their understanding against with each other with less time in-between. The second study focuses on students' learning activities by studying the means by which students learn to organize and direct their behavior. Results show that students take responsibility for their learning by creating necessary artifacts such as learning issues and problem statements. Most importantly, students comment on other students' work as they exchange feedback in a collegial manner. The results of the third study emphasize the role of the facilitator in creating a potential for students to become active learners by commenting on each other's work. Out of two different facilitative strategies, *meta-commenting* gives more possibilities for students to express their reasoning.

To some extent, schools give teachers and the system control over what students learn. However, the results of the fourth study show how the students take the opportunity to do something else in the online courses studied as the students' discussions do not only contain course-related aspects. In addition, the traditional small talk in face-to-face situations has more or less officially become an integral part of the online discourse. The discourse is available to all, not only between classmates sharing a bench, but also to all course participants, including the tutor. This has effect on how students and teachers communicate with each other, and as a consequence, it also affects their construction of themselves. As the online environment enables them to occupy the conversational space for as long and as much as desired, new forms of narratives, or new genres are likely to influence the way that self-identity is constructed in online discursive activities.

The results of all the studies show the importance of the connection between the content of the courses and students' professional practice. This combination creates a possibility to further develop their professional discourse. As students prefer to discuss issues of their professional lives integrated with course interaction, a tighter connection between the university and the students' professional practice has proved to be profitable. A general finding in all the studies is that levels of participation and interaction are higher when students discuss their own ideas or take part in making decisions about how to plan work. This indicates, supported in particular by the results of the fourth study, that the development of self is an issue that students will devote time to.