Mandatory Participation in Asynchronous Learning Networks
Christian Hardless, Johan Lundin and Urban Nulden
Viktoria Institute, Box 620, 405 30 Göteborg, Sweden
(hardless,lundin,nulden)@viktoria.informatik.gu.se

Abstract
In this paper, we report on our experiences with an asynchronous learning network (ALN) based course in higher education in which participation was not an option but a requirement. Mandatory participation in collaborative learning was the primary examination that had to be passed in order to qualify for the secondary examination, the authoring of a short essay. The evaluations show that mandatory participation as examination (MPE) is a viable format of examination for ALN based learning. The main strength of this format of examination is that it promotes active participation, which is a main ingredient in the desired learning process. Surprisingly in practice, ALN based learning with MPE was not considered beneficial for learning by the students. This is explained by the problematic shift from teacher-centered to learner-centered education and the traditional view of examination as separated from learning.

1. Introduction

In making learning possible, information technology is suggested as a powerful tool (Pea 1993). Computers can “facilitate the development of knowledge building communities” (Scardamalia and Bereiter 1994), but it is important to understand the underlying pedagogical assumptions when designing IT for educational purposes (e.g., Leidner and Jarvenpaa 1995).

The term asynchronous learning network (ALN) is commonly used when referring to information technology based environments supporting teaching and learning (Hiltz and Wellman 1997). ALNs are used to enhance educational activities, and a common use of ALNs is for distributing course material and information to the students. Various types of conferencing are also provided to facilitate interaction among the participating students.

Examination is important for learning since it is well known that the way students are examined has a strong impact on their choice of strategy for studying. If students perceive that their learning will be measured in terms of reproducing facts or implementing memorized procedures, they will most likely adopt study approaches that prevent deeper understanding (Ramsden 1992). Even if good results have been achieved in one format of examination, the same students rarely perform as well if they are faced with more challenging formats of examination (Laurillard 1993). This implies that students can achieve good results in examinations, and still exhibit fundamental misunderstandings. Traditional formats of examination in higher education have long been criticized for being destructive to the process of learning and, as a consequence of this, alternative formats for conducting examination have evolved.

Successful ALN based courses need an examination procedure that reflects the intended learning process. Often, participation is graded and term papers and other assignments are employed; however, there is very little documented and explicit research about examination in ALN, which is surprising considering the importance of examination. Some sporadic results have been reported such as Harasim (1995) in which they suggest to allocate a grade for online participation. We argue that examination is crucial for successful use of ALNs and, therefore, deserves more attention in research.

There is a need to find appropriate examination formats that are aligned with the desired learning processes in ALNs; therefore, in this paper we explore the use of “mandatory participation as examination” (MPE) in ALN based courses. We investigate the perceptions and opinions about this format of examination. The research questions raised in this paper are: Why do students prefer certain formats of examination? And, how do students find MPE in an ALN?

The remainder of this paper is organized in the following sections: First, the theoretical background to this research is given. In the next section, we discuss the motivation for, design of and evaluation of MPE in ALN. We then evaluate MPE from the perspective of the students and investigate some surprising results. Finally, we discuss the results and reach some conclusions.

2. Background

This section gives a brief theoretical background. The responsibility of the teacher or course designer is to “make student learning possible” (Laurillard 1993) by creating a learning environment that effectively and meaningfully supports learning. In creating such a learning environment, our understanding of education and the learning process is influenced by three main pedagogical ideas. These ideas are the grounding assumptions, i.e., “the fundamental assumptions underlying our conception of the teaching-learning process” (Duffy and Cunningham 1996, p.171) and include:

- the understanding of learning as individual construction of knowledge, i.e., constructivism (e.g., Leidner and Jarvenpaa 1995);