Evaluation of web based communication and cooperation in a course in teacher education at a German University

Most of the universities have established some kind of e-Learning courses to support virtual learning. Often they use web based software platforms like WebCT or Blackboard. The experiences with such forms of learning are very different. Some are very enthusiastic; others are very sceptical about such platforms. Teaching and learning with new media is a great challenge for teaching at university, because to use the technique in a proper way needs some important prerequisites. For example the handling of the platforms must be easy for everybody, and the students must have the ability to use computer and internet.

To work with e-Learning software platforms there are different options: one is information, one is communication, and one is cooperation. For communication there are synchronic and asynchronic forms. Synchronic communication forms are for example chat and instant messenger services. Asynchronic forms are for example e-Mail and Discussion Boards. For cooperation or collaboration one can use file transfer function or whiteboards.

There are several reasons why students have problems in using such platforms. One could be a lack of understanding; one could be a lack of experiences. In a study at the university of Hamburg teacher students which attend a course on ‘virtual school’ where asked to use an e-learning platform for information, communication and cooperation during their group work. The groups had the task to evaluate websites for teachers in different subjects, to analyse learning software for young students, and to develop classroom projects from a constructivist point of view. To work on these tasks they have to use e-Learning software platform Blackboard. Blackboard is one of the biggest players in the e-Learning market and offers the user to create course sites in which students can enrol. The system offers a wide range of possibilities. One can make announcements, provide course documents, and they are possibilities to send emails, to chat or to use discussion boards, e.g. After a period of eight weeks of group work the students had to present the projects on the course website for discussion. The course was attended by 80 students of a course for teacher education. Most of the students were freshmen, two third were female.

A questionnaire was used to evaluate the experiences by using Blackboard. The questionnaire has several dimensions which focus to different aspects. One aspect has been the ability of the students to use computer and internet which was called media competence. Another aspects focus on the students’ experiences in using Blackboard.

The results show that 20% of the students have had technical problems to use Blackboard in a proper way. One of these problems has been a slow modem for internet access. Most of them used Blackboard only for information and communication but not for cooperation. They preferred to meet ‘offline’ to work on their tasks. Only one group of twenty-five groups used a discussion board, none of them the chat room or the whiteboard. Two third of the students used Blackboard up to ten times, one third less than five times. Most of the students ‘forgot’ to read some of the course documents. Asked which of the options of Blackboard they find useful and which they really used, most of them find that announcements and emails to the instructor are very useful and
has been used too. But there is a big gap for the more cooperative options of Blackboard. Half the students answered that chat and discussion boards are very useful, but only a few of them used them. More than one third of the students called working with Blackboard very awkward. Further results are presented.

One of the conclusions of the evaluation study is that it is very necessary to give the students an extensive introduction in working with e-Learning software platforms. And another conclusion is that the pedagogical sense of using such platforms must fit the communication and cooperation demands of students.