# Distributed CSCL/T in a Groupware Environment

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#### **ABSTRACT**

Using FLE2 groupware (Future Learning Environment 2, <a href="http://fle2.uiah.fi">http://fle2.uiah.fi</a>) we have tried to integrate a distance education course into the regular academic programme at Roskilde University, Denmark. The course was offered jointly by two universities, attracting students and involving teachers from both institutions. The practical and pedagogical problems encountered are discussed, and it is suggested that while net-based teaching may be suitable only under certain circumstances in a normal academic programme, skills of communicating and working in an online environment are important qualifications that should be introduced broadly into academic life.

#### Keywords

Future Learning Environment 2, net-based collaboration, net-based learning, online courses, resource sharing.

## SHARING A COURSE USING FLE2 (FUTURE LEARNING ENVIRONMENT 2)

Roskilde University accepts quite a few foreign students, and there is a need for many courses in English. A way of broadening the scope of our programmes may be to share teachers and students with other universities. In Spring 2001 the Communication, Journalism and Computer Science Dept. at Roskilde offered a course in *Methods in Internet Research* in collaboration with the Media Studies Dept. at Aarhus University, Denmark. The 3 ECTS points course (European Credit Transfer System) included two face-to-face classes: An initial introduction to FLE2 and a summing up at the end of the course. All other activities were net-based. 38 Danish and international students participated actively. The course was divided into four "net seminars", each one lasting a week and introducing a selected theme from the vast field of inquiry. Each seminar was run by a different instructor (located in Aarhus, Lyngby, Roenne, Denmark, or Gothenburg, Sweden) who assigned tasks to be performed and topics to be discussed by the students who were divided into four groups. A final week was reserved for the students to write an essay.

FLE 2 is designed to support a pedagogy consisting of problem based learning (PBL) and inquiry learning (see: http://fle2.uiah.fi/pedagogy.html). In the course in question we have not adhered strictly to the progressive inquiry pedagogy, nor have we used the system as intended by its creators. FLE2 is a groupware system meant to supplement face-to-face classroom work. We have used it as a conferencing and collaborative work tool in what has been primarily a distance education course. For this kind of use FLE2 is not optimal.

## **LESSONS LEARNED**

#### Net-based education is demanding for instructors as well as students

In terms of drawing upon distributed competences the course was quite successful. In terms of efficiency, however, it was not. The course was extraordinarily time consuming for all involved, and we experienced both practical and pedagogical problems. Coordinating two programmes at different universities proved complicated, curricula not yet being geared for that eventuality. Getting the students up and running in the system was unexpectedly time consuming. Achieving an acceptable level of proficiency in using FLE2 involved a fair amount of extra work, and it had a negative impact on the pace of the course. Instructing in the use of an online system is a one-off investment, but in terms of time spent on technical matters it is a heavy one for the first online course that the students attend.

All instructors were familiar with the techniques of online teaching. We had of course coordinated the syllabus in advance and had outlined roles and responsibilities. But in our conventional shyness of encroaching upon the practices of a colleague we failed to agree in detail upon pedagogical methods. Thus the students experienced four rather different personalities and approaches to online tutoring ranging from laissez faire to zealous participation in even the smallest event. The free choice of teaching methods has no future in this kind of online teaching.

Only a few of the students had prior experience with online courses. Most of our students expected a smaller workload than in a traditional course, and the amount of work involved in getting acquainted with FLE2 and participating in discussions took them by surprise. Adapting to the new way of working in an online environment was indeed a real obstacle. In the beginning most of them felt uncomfortable and exposed having to write notes in the threaded discussions. We had a few lurkers. But those students who did overcome the initial shyness grew increasingly bold in contributing to the discussions, and some ended up being quite keen on the net-based way of working. Students interviewed by the evaluator indicated that the course had been a rich learning experience as well as a frustrating one. Most students spent too much time on tasks that normally take only a few minutes in an ordinary conversation. Also the interface did not appear all that intuitive, and

navigation seemed slow and complicated. Part of the blame should be placed on the course designers and not on the software, as we will discuss below.

#### **Making decisions**

Making decisions is difficult in net-based collaboration and learning. Some decisions are of course unavoidable. But in general, students should not be given even simple choices that seem so natural in the classroom. Let a group of students choose between working on problem A or problem B, and the result will be a meta-discussion going on for days. As a tool for making decisions, the chat included in FLE2 is far more efficient than threaded discussion. But chat is only manageable with a small number of participants working in synchronous mode. We also noticed that some students were reluctant to make chat decisions involving the entire group.

#### Allowing things to take time

The course had a tight schedule rather like lectures in a classroom. This proved to be a mistake as most discussions took some time to get going. We observed a proportional relation between duration and intensity of the discussions. One should consider carefully whether or not a subject is suitable for a net-based course. In-depth analysis of a relatively narrow theme would probably be more suitable than the broad introduction that we have attempted. But all in all you should expect to cover less ground in an online course than in a conventional classroom course.

#### **Group composition and size**

Since most of the assignments involved discussion rather than project work we assumed that large groups would be appropriate. Assigning students from two institutions and from many countries to work together in four large groups, however, provided for a heterogeneity that made it difficult to establish a sense of community and obligation to contribute for the common good. Also being so many in each group may have encouraged lurking.

#### **Avoiding clutter**

The course was presented in FLE2 as an online syllabus, listing all four seminars in chronological order. Initially this provided a good overview of the course. But as the number of contributions grew, so did complexity, and working with the system became a protracted affair. The print media logic of the course presentation turned out to be counterproductive in the online environment where speed and accessibility are all-important. It would be better to break up the course into a series of shorter courses, one for each net seminar. However, presenting just one fragment of the course at a time may result in a kind of tunnel vision, robbing the student of an understanding of the course as a whole. Probably a better solution is to introduce a kind of "fish eye perspective".

## Looking ahead

In 21<sup>st</sup> century society it will become an important qualification to be able to communicate and work collaboratively in net-based environments. It certainly should be taught at the university level, but getting started is hard. The course in Internet Research Methods has demonstrated some of the difficulties involved in integrating net-based teaching into a conventional academic programme. Many new skills are to be mastered – both for students and for faculty, and in early courses the problems of adapting to the new setting tend to dominate.

## **NOTES**

1 Faculty for the course was Joergen Bang, Aarhus University, Robin Cheesman, Simon Heilesen and Eva Ekeblad, Roskilde University. Teemu Leinonen, Medialab, Helsinki, participated in technical discussions, and Mia Cudrio Thomsen, Copenhagen Business School, evaluated the course. This paper is *not* part of the FLE2 software evaluation project and does *not* deal with the functionality and pedagogical qualities of the system. It is a report on a teaching experiment that could have been performed in several other conferencing systems.