



Using Knowledge Forum for Collaborative Learning. Connecting Students from Germany and Austria A Look at the Outcomes



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COURSE SETTINGS – THE FRAME


In the winter semester 2002/03 the presenter taught **two courses** - one at the University of Hamburg/ Germany and one at the University of Linz/Austria - **both**:


- were dealing with Internet-based learning in the area of business & vocational education
- started in October and ended at the end of January
- had similar goals
 - ⇒ to use the Internet in different ways for posting and exchanging information, for communication and cooperation, and for collaborative learning
 - ⇒ to learn as a group how to use Knowledge Forum for specific tasks
 - ⇒ to have WebQuests as a result of collaborative learning
 - ⇒ to reflect upon the social processes within the different groups, upon the use of Knowledge Forum, and upon the learning outcomes

And both courses had their own web-pages that can be visited at:

-  <http://www.ibw.uni-hamburg.de/lehre/ws0203/iblh0203> and
-  <http://www.wipaed.uni-linz.ac.at/lehre/ibws0203>

THE PROCESS OF 14 WEEKS

 The course in **Linz** was taught as a distance course with 7 online meetings during the semester, using Netmeeting for these synchronous meetings. 23 students were participating, building 6 groups. A tutor was the contact person for all technical and organizational questions.

 In **Hamburg**, there were 36 participants, meeting every second week synchronously at the university. Like in Linz all the other meetings have been so-called asynchronous meetings. The students had tasks and problems to solve from week to week. This process and the way they organized their work was decided by themselves as a matter of self-organization.

Both groups had to go through 4 phases:

- (1) 2 weeks for getting familiar with the technique, the special setting of the course and to build and get familiar within the small groups.
- (2) 4 weeks to work on a first task within this small group (4-6 persons), building their own homepages and using Knowledge Forum (KF) for the first time.
- (3) 2 weeks to get into contact with a partner group in the other course – there were now mixed groups (6 students from Hamburg and 4 students from Linz).
- (4) Finally these groups worked together for 7 weeks by using KF to create their own WebQuest: they had to learn about the concept of WebQuests, get information on one specific pedagogical theory, build their WebQuest.

For these learning processes KF was available and used by the groups. Eventually, they had to present it, and give feedback to the work of the others.

The **6 WebQuests** are published at:

<http://www.ibw.uni-hamburg.de/personen/mitarbeiter/gramlinger/webquests/>

KNOWLEDGE FORUM



Knowledge Forum (KF) is the second-generation product which has started with CSILE (Computer Supported Intentional Learning Environments) at the Ontario Institute for Studies in Education of the University of Toronto. It is an asynchronous discourse medium with contributions to a community knowledge base, which resides on a server and is accessible to every user with a password. KF "permits a depth of embedding that goes well beyond what is possible with other forms of so-called knowledgeware, such as the threaded discourse systems common on the Web" (Scardamalia 2002). The philosophy is to turn over to the learners the responsibility of using notes and views to create a valuable shared knowledge resource for their community and that these ideas always remain the focus of this responsibility. For Marlene Scardamalia the challenge of a knowledge building pedagogy is "to engage students in the collaborative solution of knowledge problems, in such a way that responsibility for the success of the effort is shared by the students instead of being borne by the teacher" (2002).

Helpful resources: => www.knowledgeforum.com
=> www.ikit.org

OUTCOMES

The instrument we used was the same questionnaire at the end of both courses. The answers show a picture that strengthen the impressions and the personal view the presenter experienced during the whole course:

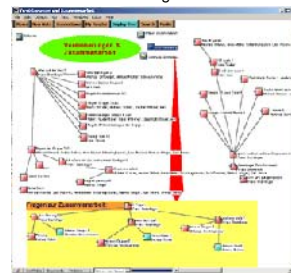
- ➔ In general, it shows a difference between the two groups in Hamburg and Linz concerning the use of ICT for learning purposes (those from Linz being more used to build their own web-pages for courses at the university and to communicate within courses regularly via email).
- ➔ The students in Linz perceived KF easier to handle. They learned rather fast to work with KF in a useful manner, and they did rather not agree to the statement "KF would be easier to handle if there was a German version" (mean for Linz: 3,35) contrarily to the students from Germany (2,22). (On a scale from "1 = I strongly agree" to "5 = I strongly disagree".)

- ➔ Both groups agreed strongly to the statement that **KF** should be used **in combination** with other Internet-based tools. In this case, the following two aspects should be considered: In addition to the use of KF both groups were communicating intensively via email and also their web-pages were used as additional tools for communication. In the second half of the course, there had been some technical problems with the KF-database which forced the groups to find other ways for accomplishing their tasks.



- ➔ Nevertheless, both groups used **KF** strongly **for communicating**. Cooperation amongst the groups was experienced more difficult. Within the local small groups (2,44) and within the whole local group (2,59) cooperation by using KF could have been better. Most often it was used and quoted helpful for cooperating in the mixed groups with students both from Hamburg and Linz (2,19).

- ➔ **Collaborative learning** did not take place as much as intended. Learning from each other was only successful in some areas. There was a significant difference between Hamburg and Linz: the students from Hamburg seemed to have learned more from each other (2,69) than the students from Linz (3,35). This emphasizes another general outcome: learning in a collaborative way is not really appreciated. Both groups rather agreed than disagreed to the statement that they would **prefer individual learning** to collaborative learning (2,56). The presenter made the same conclusion looking at the way the students worked together. A difference can be shown between Hamburg and Linz – in the answers of the two groups (not significantly) as well as in the presenter's personal observation – presenting students from Linz more used to collaborative working and learning than those from Hamburg.



- ➔ In contrary to this, **learning with the PC** seemed to be no problem at all for both groups. Eventually, KF was rated helpful for knowledge building processes (2,72), however, it should be accompanied by additional software or tools (esp. by email).

- ➔ Both groups disagreed to the statements that KF is helpful for **self-directed learning** (3,42) or for **taking more responsibility** for their learning success (3,60).
- ➔ While the group in Hamburg seemed to see no big difference between the **client** version versus the **browser version** of KF (Hamburg-mean value for the statement "I prefer the client version of KF to the browser version" = 2,76), the students in Linz significantly did (1,9).
- ➔ The question whether the students could imagine to use **KF for their own teaching** later on showed the strongest difference: while the students in Hamburg could imagine to do so (2,33) those from Linz could rather not (3,44).
- ➔ Asked for possibilities to improve the usability of KF, most answers included the following: some synchronous tools like a chat; a message via email as soon new notes are posted to the database; a graphical user interface that is easier to handle.
- ➔ The following **advantages** of KF could be found in most of the answers: graphical representation of the notes in different views; good usability from the very beginning; different users can post and use the database at the same time; high transparency of all posted notes.

The database "KFws0203_neu.kdb" can be found at the server: 134.100.137.5 (www.ibw.uni-hamburg.de) and visited with the user guest, pw guest (language is German).

NECESSARY NEXT STEPS

The picture that is drawn by the answers is somewhat conflictive. There seems to be a tension between the wish to **learn individually** and the feeling that **collaborative learning** can have more positive outcomes.

To get a better view of what is possible and what makes sense for the individual learner it is necessary to use a course setting like the one described here for a longer period of time. The same can be stated for the use of KF: to use the potential of KF in a better way (more in the way of knowledge building and less for communication purposes) it needs a longer time to get familiar with Knowledge Forum and help each other in exploring it.

The critical point is not handling KF – the critical point is getting to understand the philosophy and the potential of knowledge sharing for collaborative learning and building new knowledge. Scardamalia uses the term "culture-building" in the sense of establishing a school-wide culture of knowledge building.

- ➔ **We are still one step behind – learning to understand knowledge building before being able to establish such a culture.**