

Synchronic Distance Learning: A Brief Review and Implications

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Abstract

As new technologies evolved, novel approaches of interaction between students and teachers, like synchronized learning, have emerged. Synchronized sessions take place in a virtual classroom assisted by various technological and communicational aids, such as video conferencing. In this article we describe the trial implementation of a synchronized eLearning system at the College of Management in Israel and summarize opinions and reactions of students and academic staff who participated in the program.

Synchronized eLearning – brief review

Higher education is commonly based on regular interaction between teachers and their students. As new technologies evolved, novel approaches have emerged down through the years which have made it possible to decrease this interaction yet still enable students to learn and study. Radio and television made higher education accessible in rural places. As satellite broadcasting became more widespread it led to video conferencing and interaction between students and teachers. Further developments, including the wide use of the Internet, engendered a communications revolution and made eLearning a standard, commonly used medium in universities and colleges throughout the world.

Unlike traditional learning, which is limited due to time and place constraints,

eLearning may be applied anywhere, anytime. Lessons are recorded, and may be viewed in the future, upon request. Synchronized eLearning is very similar to traditional learning, without the constraint of place. Students and their teacher meet at the same time, yet in a virtual classroom.

Essence of synchronized learning

Synchronized learning is seemingly similar to the traditional learning method: a teacher and students take part in a class and interact throughout the session. In synchronized sessions, however, teachers and student are not in eye contact with each other but in geographically distant sites. Synchronized sessions take place in a virtual classroom assisted by various technological and communicational aids, such as video conferencing.

Due to the geographical distance, teachers using this technique have to acquire a new skill that may not be so pressing or vital as when teaching traditionally: communicating without constant eye contact; maintaining attentiveness when students may be distracted easily; and the ability to operate the advanced technological eLearning tools. On the other hand, students are generally highly motivated when using synchronized eLearning; feedback is given immediately; and questions can be asked and answers given without delay. Scheduled class, like traditional learning, necessitate students to be constantly up-to-dated.

Pros and Cons of Synchronized Learning

Synchronized learning has several significant advantages:

Cost and time efficiency

There is no need to travel saving time for both teachers and students. And since synchronized learning essentially requires only a computer, Internet connection and headset, the costs involved in establishing and maintaining a classroom are either very low or non-existent.

Geographical distance is not a constraint

Students who travel often or those who combine studies and work can use synchronized learning and continue learning wherever they may be in the world.

Enriched content and format

Lesson content becomes enriched and dynamic with the possibility of using video, a wide variety of presentation tools and online Internet browsing.

Suitability and compatibility

For many student eLearning is very comfortable providing them with such possibilities as chatting with their classmates or talking with a teaching assistant, all without disturbing the teacher or interfering with the session.

Advanced technology

Using advanced technologies is exciting and arouses inquisitiveness. The entire session is recorded, thus allowing students to focus on the class content without worrying about whether they might have missed something crucial. Later, parts of the lecture that were unclear can be repeated as many times as the student feels necessary. And, of course, the recordings are very helpful for students who missed a class or who may have been sick for a period of time.

Anxiety reduction

Students can correspond “silently” with the lecturer or teaching assistant during the online lesson, an advantage that helps students reduce or overcome their anxiety.

Most of the drawbacks associated with synchronized learning have to do with technology. Session preparation requires more effort compared to the traditional class. Relying on technology is subject to class cancellations and problems when faults occur. Some students prefer the traditional class. They want to “feel” the campus and see their friends next to them.

Operational aspects of eLearning

Three elements should be considered when implementing eLearning in an academic institute:

Technical aspects

eLearning system requires a communication and computing infrastructure, which can vary according to operational techniques (video conference, software-based system, etc.). Computers and software must be purchased and maintained while academic staff and students must be trained in how to use the equipment. Sometimes, eLearning applications require further communication channels in order to improve and enhance teacher-student or student-student interaction, and the sharing and delivery of course materials (presentations, case studies, homework, etc.).

Technological aspects

Successful usage of these technologies necessitates faculty acquiring specific skills to master eLearning technologies since they are coping with technologies based on management tools and with a framework (managing the students and interacting with them) that requires preparedness on the part of both students and staff.

Pedagogic/educational aspects

Course contents and educational aids have to be altered in order to meet eLearning needs. In many cases since there is no eye contact, the teacher has to find ways to increase interaction and verify student attentiveness. All staff members willing to use eLearning have to be trained in both technical issues and pedagogic requirements discussed above. Students should be familiar with this technology and learn how to use the system. In order to approve accessibility, software has to be installed on distant computers, thus requiring a support center for both students and academic staff members.

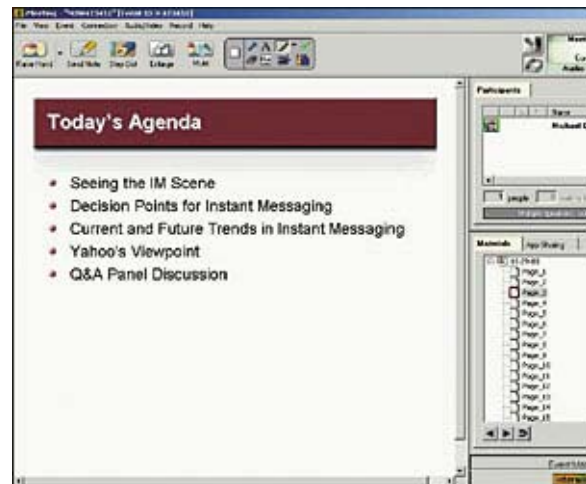
Experimental pilot at the College of Management

An eLearning system was tested in the course of seven semesters for several courses as part of the ICT and Management specializations of the School of Business Administration. About 420 students and 15 teachers and assistants participated. All courses received technical and technological support from staff members, while training, software and infrastructure were outsourced.

Student and teacher reactions and feedback were based on midterm and end-term questionnaires. All teachers and assistants without exception were happy with the system, the support and ease of use. 67% of the students found the eLearning course as efficient as a traditional course. Topics addressed in the questionnaire included the knowledge students acquired, efficiency, class attendance contribution and intellectual challenge. When asked whether they would take another eLearning based course, 45% of the students chose “definitely”, and 25% chose “yes”.

Screen Shot Examples

• **Student's interface:**



• **Professor's interface:**



Conclusions

Feedback from both students and staff members indicates that they accept eLearning and sometimes even prefer using it to traditional learning. We believe that there is an optimal mix of traditional, synchronized and asynchronous learning for each course. Any of the optional learning techniques can be enhanced using computer-aided tools and technologies, such as email and forums.

References

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