

ARCTIC STUDENTS AND EDUCATORS REQUIREMENTS IN E-LEARNING

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Abstract

The virtual learning tools project requirement study, conducted fall 2009, suggests that distance learning will gradually move towards a more open sourced multimedia-oriented approach. Results show that modern distance learning solutions need to offer options for both synchronous and asynchronous communication, equally in actual teaching as well as student-to-student interaction. There are technical and financial challenges in providing modern distance learning solutions to Arctic residents: internet connection quality, equipment availability, financial strength, difference in time zones and language barriers emphasizing the importance of affordable and user-friendly Virtual Learning Tools.

Background

The Arctic virtual learning tools project (2009 – 2011) is funded by the Nordic council of Ministers Arctic co-operation program and led by the University of the Arctic (www.uarctic.org) and the Arctic Portal (www.arcticportal.org). The project will improve access to education in the Arctic region through online learning tools that support the existing programs and curriculum of the UArctic. This will be achieved by the development of new learning resources (Open Textbooks) and online learning environment (Virtual Classroom). These new resources will serve to improve access to education and the standard of living of Arctic residents.

Material and methods

The poster presents the results from an online survey conducted in fall 2009 among the UArctic member organizations and others affiliated to the project. The questioner was composed of 20 questions, multiple choice and open. The survey was targeted at both experienced and non experienced users of distance learning. The responders were students, educators and moderators throughout the Arctic, of which 77% had previous experience with distance learning.

Results and Discussion

- » Those who had had previous experience with distance learning 98% stated that they would be willing to use the method of studying again.
- » 73% of survey participants had modern, stable high-speed Internet connection (figure 2). Only 3% percent of participants were still using a dial up modem. Indicating that with modern solutions interactive distance learning can be offered to can and will be offered to Arctic residents.
- » Over half of the participants felt that both live video (Figure 3) and recorded sessions (Figure 4) were important or very important
- » 66% of survey participants stated they desired to have live video/audio despite increased requirements to attend. Lack of flexibility was one of the main reasons given to rejecting the possibility. These results indicate that all live sessions need to be provided also as recordings.
- » Live text chat, email capability, forums and technical support were all considered important or very important by 60% or more, identifying these features as core elements of modern learning management systems.
- » Asynchronous or synchronous virtual interaction, are important features as a number of students state that this is generally missed in present distance learning.
- » Live video can be troublesome due to differences in time zones across the Arctic and due to Internet connectivity in the region.



Figure 1. Members of the Virtual Learning Tools project in Akureyri, Iceland 2009. Photo Philip Burgess

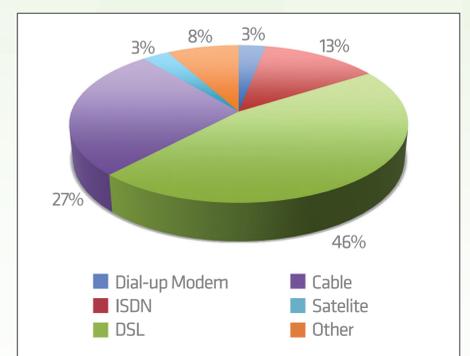


Figure 2. The type of Internet connection most frequently used by responders

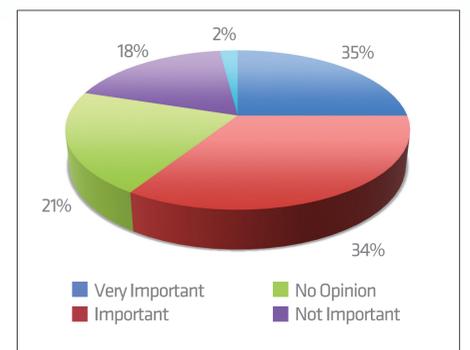


Figure 3. Importance of live video lectures in distance education

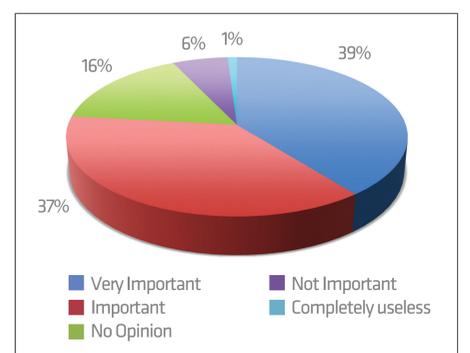


Figure 4. Importance of recorded video lectures in distance education

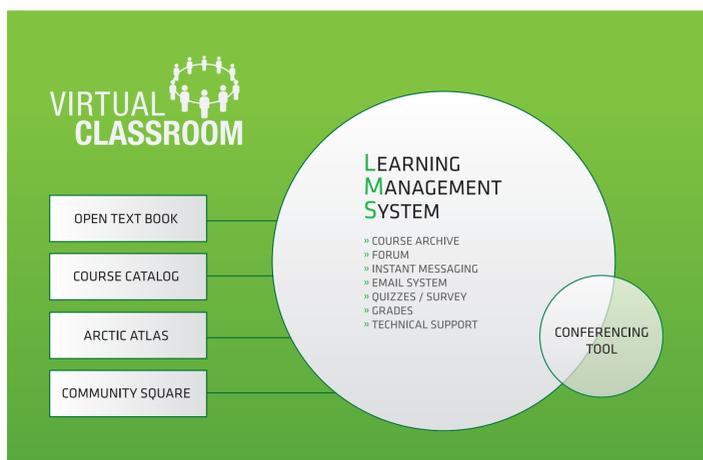


Figure 5. Virtual Classroom schematics

Figure 5. illustrates the system schematics of the new virtual online learning platform composed of a Learning Management System and Conferencing Tools, featuring advanced live and recording capabilities, based on the findings of the requirement study.

A pilot version of the new tool is scheduled to be available for testing fall 2010. Testing will be conducted by providing pilot courses in cooperation with EALAT and APECS. The system will be integrated with other cooperation projects of relevance, such as the UArctic Open Textbooks, the UArctic Course Catalog, the Arctic Atlas and the Community Square Project.

For further information about the project contact:

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or visit www.arcticportal.org/VLT