

Lecture Capture Update 2010 -11

Background

In 2008-09 the Virtualization Task Force at Queen's University was charged with examining the potential for use of information technology and electronic media in reducing costs of instruction, alleviating space constraints associated with growing enrolment, and enhancing the quality of the teaching and learning environment. As part of this examination a system was developed which allowed for automatic capturing and uploading to a streaming server of live lectures within BioSciences 1101 (450 students). In two pilot projects that were conducted during the fall of 2009 these captured then streamed lectures were used to supplement in-class learning for two large first year courses, one in Political Studies (POLS110) and the other in Biology (BIOL102), and to offer as well a virtual section of BIOL102 in which students watched the lectures on-line only, while maintaining all other on traditional components of the course including tutorials, office hours etc. Analysis of the results of the pilot projects which focussed on the captured lectures to supplement in-class learning indicated that students used the captured lectures to help them learn the course material; they felt that use of such materials was valuable, it did not affect attendance, they worried less about missing something and they listened more during class. Students in the virtual section of BIOL102 indicated that the captured and streamed lectures were a useful way to learn the class material, enjoyed the flexibility of not having to attend class, and for the most part agreed that offering a course with captured and streamed lectures was effective. Based upon the results of the pilot projects, captured and streamed lectures will continue to be used in these courses and will be expanded to new courses in 2010-11. To increase the capacity to lecture capture in a variety of different class sizes Walter Light Hall 205 (200 students) was equipped with the necessary equipment during the summer. For this academic year lecture capture will occur in POLS 110, BIOL 102, GPHY 101, PHGY 214. APSC 100 and components DEVS 100. In addition there has been single event capture for the Queen's Learning Commons, School of Graduate Studies, School of Medicine and GPHY 214.

Of particular interest for this academic year is a third pilot project in which captured lectures will be used to completely redesign a large first year course in a blended format. In winter of 2011 the lectures captured in GPHY 101 during the fall semester of 2010 will be made available for students to view. Instead of attending actual lectures, students will be required to view the lectures on their own time prior to attending a 90 minutes class, once per week. In this class with the professor, students will be actively engaged in small group problem solving, discussion, debate and other forms of cooperative learning activities. The assessment proposed will investigate the impact of lecture capture and blended course design on (1) student engagement using CLASSE, (2) approaches to learning using the SPQ, (3) academic performance, (4) and student perception. This assessment of this innovative practice has been funded by a grant from the [Higher Education Quality Council of Ontario](#) over the next two years.

Use of the Lecture Capture System (academic year 2010 -11):

In total there have been 35 different faculty members/staff who have been users of the system. This is a dramatic increase from last year which was three. The total number of lectures or sessions that have been captured has tripled. The use has ranged from capturing of live lectures in BIO110 and WL205 for full course and single event presentations to utilizing the FSLF Lecture theatre to capture a lecture to be used at a future date or replace a cancelled lecture. The extensive use of the FSLF lecture theatre has demonstrated the usefulness of the lecture capture system as a tool to develop learning resources which can be posted on-line. This has afforded the opportunity to change the interaction with students when they have met face to face. In addition there is growing interest in uses captured lectures for professional development and for demonstrating teaching effectiveness.

1. PHYS 214: 50 lectures
2. DEVS 100: 3 lectures
3. BIOL 102: 64 lectures

4. BIOL 103: 52 lectures
5. POLS 110: 46 Lectures
6. MUSC 102: 11 lectures
7. GPHY 101: 38 Lectures
8. GPHY 103: 1 lecture
9. APPSC 100: 17 lectures
10. School of Medicine: 26 lectures
11. SGSR: 1 session
12. Registrar: 1 session
13. Writing Centre: 1 session
14. CTL: 1 session

See <http://www.queensu.ca/ctl/lecturecapture/example.html> for an example lecture using our system.

See <http://www.queensu.ca/ctl/lecturecapture/findings/index.html> for more details of the findings of the pilot studies.

See <https://wiki.queensu.ca/display/lectcap/Lecture+Capture+and+Blended+Learning> for a captured presentation on the lecture capture system and its use at Queen's.

See <http://www.queensu.ca/news/articles/videotaped-lectures-get-high-marks> for the Queen's News Centre coverage of the pilot projects last year.

See <http://www.queensu.ca/news/articles/videotaped-lectures-offer-alternatives-student-learning> for the Queen's News Centre coverage of the pilot projects for 2010 -11. This posting was covered in the Academics's Top Ten on Friday October 1, 2010 <http://www.academicagroup.ca/node/11137>.