Experiences in Using Coursecast Technology

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Coursecast Technologies

• Since 2007, there have been a plethora of online meeting technologies. At CIS, we choose the Open Source route: The Socrates Coursecast system from CMU.

• Two unique features: a) simultaneous synchronized recording of multiple video sources and b) high compression ratio (<200MB for each 90 min session).

• Other considerations include range of camera support, learning tools, such as notes channels and textual description of video sequences, search capability, low hardware dependency, and Blackboard integration capability.
Unique Challenges for Temple

• As part of Temple tradition, many students work part time. Time management is common challenge for Temple students at all levels.

• Temple’s classroom management is fragmented. It is unrealistic to expect uniform high technology support in all rooms. Each college is pushing for its own technology stack under different budgetary constraints: WebEx, Echo360, Mediasite, Adobe, TechSmith, etc. As a result, Medical School and Fox School of Business pulled out to start their own technology stacks. It seemed very difficult to form a consensus on teaching hardware/software technologies.
Students vs. Faculty

• Coursecast technologies are unanimously embraced by all students regardless of specialties and seniority.

• Faculty’s responses are mixed. Many fear the extra work. Some fear job security. Others worry about accidental classroom tong-slips. Some administrator worried that Temple might degenerate into University of Phoenix or other online schools.

• Multiple committees were formed to study the issues.

• Key question: MOOC or no MOOC?
2010 CIS Choices

• No MOOC.
• Yes, coursecast. All recording are in real time, zero prep.
• No two-way video
• Yes two-way audio, optional
• Yes asynchronous recording (to overcome the distance factor in two-way communications)
• Meanwhile, Coursecast became a successful startup venture: www.panopto.com.
• College of Science and Technology has been customer since 2010.
Collaboration with Computer Services

• With close collaboration with Computer Services, all Tuttleman, Gladfelter, Anderson, Beury and Barton classroom podium computers have Panopto software installed.

• All instructor needs to do is to bring his/her own webcam (with builtin microphone) to start coursecasting.
Faculty Involvement

• With Chair’s support, CIS formed “Online Curriculum Committee”. Multiple faculty volunteered: Anthony Hughes, Rolf Lakaemper, Alex Yates, etc.

• Started from one course (web programming), grew into multiple courses (mobile programming, operating systems and networks and discrete mathematics).

• Quick demos: (CIS Math for Digital World, Richard, CIS Operating Systems and Networking, Claudia and Web and Mobile Programming, Justin)
TUJ Expansion

• We offer CIS major courses in TUJ by streaming the contents over the Atlantic Ocean.

• Started from CIS1001, the TUJ program grew into CIS1068, CIS2168 and CIS1166.

• Figured out how to remote proctor.

• Working on time table differences (TUJ does not share the same calendar as main campus).

• Solved administrative cooperation (a few exchanges with TUJ Dean’s staff).

• Worked out main campus videographer funding with CST Dean’s Office.
Professional Services

• CIS provides professional coursecast services to Math, EECS, Engineering and Fox School of Business, Faculty Senate meetings and others.
Student Feedback

• Although initially the students were not watching videos, all watch the videos before the first quiz.
• Whenever the video is late to post, instructor receives a complaint email.
• We hypothesized that knowledge retention should be better compared against without the coursecast videos. But we have not done a formal study.
• Indirect evidences include the ability to cover 5+ different programming tools in introductory web and mobile programming courses.
• Missing classes or late classes are no longer a threat to learning.
Faculty Feedback

• Can cover more materials.
• Easier for recitation.
• No missing classes due to weather, research meeting conflicts.
• Watch video helps better delivery overtime.
• Boost confidence.
About Panopto Coursecast System

- Single audio source, multiple simultaneous video source recording
- One-way video (suitable for large scale broadcast with limited bandwidth)
- Automatic indexing of PPT contents.
- Very high compression rate.
- Two-way audio optional.
- Transcription service optional (for ADA compliance).
- Custom learning channels.
- Cloud-based.
Future Plans

• We are now more MOOC ready than 2010. We have rich set of videos to draw contents for basic CS courses.
• Need an education grant to pull this off. Faculty prep time can be expensive.
• Need infrastructure support for videographer training, equipment maintenance and support.
• Need designated rooms with cameras pre-installed to reduce ware-and-tear losses. Moving webcams with cables are too easy to break.
• Classroom size may not be an inhibiting factor for future enrollments (do need increasing TA-helper support via online technologies).
Newer Technologies

• Inexpensive, light-weight doc-cams: http://www.ipevo.com/prods/Point-2-View-USB-Camera?gclid=CKWW5vzowcMCFWxp7AodzwIAxg
• Two-way video for group meetings: http://www.gotomeeting.com/online/enter or http://www.webex.com/
• Cheaper cloud computing and storage resources
• Mobile clients
• New mobile/cloud security tools
• Large volume of high quality MOOC contents...
Meeting of Minds

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