Professional Communications In Flight With UniteCast Streaming In West Kerr Hall Lab

From: Office of Program Director, Operations and Technology, Rogers Communications Centre

March 1, 2010 - In the spring of 2008 Ryerson's department of Professional Communications (Procomm) approached the operations staff in the Roger's Communications Centre (RCC) with a problem of how to better capture and distribute their student's business related presentations. Business presentations, along with how ideas are communicated both orally and visually, are a key component of Procomm's curriculum. The faculty felt that there was a need to upgrade the audiovisual components of their Kerr Hall West lab to better support capturing students during their presentations, along with their PowerPoints and then distributing the recordings using streaming media over the web. Web based files would allow students the opportunity to review their presentations off campus and work to improve their skills.

It was subsequently determined that the audiovisual components in the KHW-387 lab were not well suited to recording the presentations. The classroom's recording technology was deemed rudimentary, cumbersome to operate, out of date and, on the whole, unreliable. "I remember back in the 1970's, Procomm used some rooms in the Media Centre to support their program," commented Brad Fortner, Operations Director of the Rogers Communications Centre. "The technology was basically one unit with a tripod mounted camera connected to videotape recorder/TV set. All the Faculty had to do then was power on the camera and recorder, load a videotape and learn what the record, stop, play, rewind and fast forward buttons did. The setup was primitive by today's standards but it worked for their needs and it was no more difficult to operate than an iPod."

However when the RCC staff examined the 2008 version of the technology, it had become disjointed and difficult to use. "Procomm had changed rooms over the years and new technology –especially that most recently installed-- simply did not work," Fortner stated. "A ceiling camera had been installed with a wireless remote control. The remote made it impossible to follow students who would walk around the classroom as part of their presentation. DVD recording technology was installed to record presentations. It turned out to be difficult to use relying on a second remote control that would fail due to interference from the fluorescent lighting in the room. Additional technology was added to try to correct the situation, complicated things further and for the most part it ended up in a shelf-less lockup in a pile on the floor. It was an unworkable situation for both Faculty and Students." Fortner concluded.

After a consultation process that put the need to simply deliver the curriculum as its top priority, a team of staff and faculty from three departments developed a proposal to upgrade the classroom's video recording and presentation system. The RCC teamed with Ryerson's Media Services Department staff, who oversee the technology in the Procomm lab. Faced with minimal budget they had to implement an inexpensive recording and webcasting system that fully met the unique requirements of the Procomm's Academic program.

Due to budget limitations the cost of commercial webcasting systems was deemed to be prohibitive and the group was forced to explore lower cost alternatives. In the end Jeremy Littler of the RCC was able to provide an appropriate software solution by installing UniteCast. UniteCast is a live event webcasting application that he had developed while a Masters student in Ryerson's Communication and Culture Graduate program. UniteCast was an ideal selection as it does not require complex hardware or specialized operator training. To stream the software makes use of the existing Media Server System installed in the RCC that also services SPIRIT Radio and distributes sound effects across FCAD. UniteCast also turned out to be perfectly suited to the short-but-frequent capturing style of Procomm's presentation recording workflow. The UniteCast software was eventually installed on a Macintosh Mini computer and then embedded inside a room based Crestron Presentation Technology podium. The technology went live in September 2009 and since then instructors in Procomm have utilized UniteCast to successfully record hundreds of student presentations.

The challenges in designing the system were met through a highly productive collaboration process between Jeremy Littler of the RCC and Steve Pelletier who works for Computer and Communication Services (CCS) in their Media Services department. The two worked endless hours integrating the UniteCast system with the Crestron Presentation Technology eventually streamlining the room's audiovisual technology, automation and software integration components.

Technically, the UniteCast system utilizes a Pan-Tilt-Zoom (PTZ) camera and VGA acquisition hardware to record video and integrated PowerPoint presentations. Audio is recorded via ceiling mounted and wireless lavaliere microphones. The entire capture system is operated by students from a computer terminal located on a desk in the classroom. Instructors can easily post-view their recordings, a critical component of critiquing student presentations. The UniteCast project demonstrates that while the implementation of webcasting technology in the classroom will never be inexpensive, it is now possible to provide recording webcasting technologies in an extremely cost effective and sustainable manner that is simple for the people using it.

"Consultation with Schools around media technology be it for production or classroom presentation, has become one of the most important services we perform," added Fortner. "The pace of technological change is now so fast that having an experienced, well educated neutral entity experienced in media, and practiced in classroom delivery is something the Faculty of Communication and Design can use to real advantage."

More information on Professional Communication can be found at
http://ryerson.ca/procom/

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http://www.rcc.ryerson.ca/technology/index.htm