

5 innovative ways to use virtual classrooms in Higher Education

David Spann

Curtin Teaching and Learning
Curtin University

With constant pressure for higher education institutions to increase (or at least retain) student enrolments across the sector, many institutions are opting to keep up with demand by offering alternate methods of education provision and facilitation. By providing tools and resources such as Blackboard Collaborate and Blackboard Mobile Learn, staff are able to engage and communicate with their students; anywhere and anytime. Encouraging staff to move away from the traditional lecture-theatre and tutorial based model and to instead embrace the opportunities provided by a virtual classroom is not always easy; however some staff have been re-invigorated by this teaching method and are trialing new and innovative ways to teach their students virtually.

Background

Curtin University has been utilising web conferencing for a number of years. In 2006 a 50 seat license for Elluminate *Live!* was purchased in order to trial using the software with a common 3rd year Business Capstone unit delivered through the Curtin Business School. In 2009, following the success of the initial trial, a business case was put forward to adopt Elluminate *Live!* throughout the Business School. In 2010, the rest of the university followed suit and a site license for the whole campus was purchased. The product moved to a managed hosting environment and was also integrated into the Blackboard Learning Management System. In May 2012 the university made the decision to upgrade from Elluminate *Live!* to Blackboard Collaborate and we are currently using Version 12 .

Usage statistics show that there has been constant growth and utilisation of the tool, particularly since it was rolled out to the whole university in 2011.

Period	Rooms Started	Max Concurrent Rooms	Re-joined Attendees	Unique Attendees	Total Attendees	Recordings
2008 - 2009	0	0	608	5747	6355	0
2009 - 2010	902	7	1799	6220	8019	50
2010 - 2011	2124	8	1394	7672	9066	905
2011 - 2012	4945	15	2302	14165	16467	2225
2012 - 2012	4516	13	923	9976	10899	1521
	12487	15 (max)	7026	43780	50806	4701

Trends and new usage patterns

From 2008 to 2011 the virtual conferencing software was primarily used to:

- conduct and record online lectures
- facilitate online meetings (between students and staff members, or internal staff meetings), and
- provide virtual office hours to students studying externally, allow them the opportunity to 'drop in' and ask questions.

Since then, a number of staff have trialed using the software in a number of unique (or non-traditional) ways; taking advantage of the new functionality provided to enhance their teaching and learning practices. Some examples of how the tool has been utilised at the university include the following.

1. Combining on campus and online students

A lecture in Sexology is bringing together the online and face-to-face students by conducting a weekly Blackboard Collaborate session during the on-campus tutorial. A webcam is pointed towards the class and the Collaborate session is projected onto the screen in the seminar room. The online students take part in the tutorial by asking questions and communicating and interacting with the lecturer and fellow students. The sessions are also recorded, ensuring that the recorded lectures can be used for revision purposes and are accessible to students who were unable to attend.

2. Library online training sessions

Library staff constantly receive questions from online students asking how they can use the library, and its resources without coming onto campus. As a service to the students library staff run training sessions using Bb Collaborate where students are shown how to browse the databases, catalogues, and e-Reserve as well as informing them of information retrieval resources that are available to them. This is predominately achieved using application sharing and web tours where the staff present a demonstration and then the students application share and demonstrate what they have learnt.

3. Using a tablet and stylus for calculations

A lecturer in Mechanical Engineering has trialed the use of a stylus and WACOM tablet in Bb Collaborate. In on campus tutorials, the lecturer would use a traditional whiteboard to set engineering problems for his students to solve. He would then demonstrate the solutions using prescribed formulas learnt throughout the semester to arrive at the correct answer.

He wanted to take this traditional technique into the online environment and to use the virtual whiteboard instead. The decision to use a stylus with the virtual whiteboard was made very early on; as writing calculations on the whiteboard area with a mouse proved to be extremely difficult. The recorded sessions then provided an excellent revision tool for all the students.

4. Creating student presentations and recordings for assessment

The UniReady Program (<http://curtin.edu.au/uniready>) is a short program consisting of six online units which, on completion, provide alternative access into Curtin University. Within the online program students are required to use Bb Collaborate to meet and work on group projects. Once the project has been completed they access Bb Collaborate as moderators conducting and recording the group presentation as part of their assessment. Students are allowed multiple attempts at producing the best possible presentation, prior to the assignment due date. Once groups have created and reviewed their recordings, they nominate the recording that they like the best and then submit the link to the recording to their tutor.

5. Managing regional and international staff

Bb Collaborate is also being used extensively for tutor meetings where teaching staff of large units located all over the world are brought together to discuss strategies, identify how the unit is managed, conduct moderation of assignments and exams and define unit administration processes. Application share is often used to show sample assignments or exams, collaboratively construct marking guides or rubrics and to achieve a uniform marking and feedback strategy.

Conclusion and future plans

The provision of training and support to staff around Bb Collaborate is an area that has proved vital in encouraging the successful use and adoption of virtual classroom software. Professional development is provided throughout the semester in a number of formats including face-to-face computer workshops as well as online tutorials run virtually in Collaborate.

As the tool grows in popularity and demand, more innovative ways using Bb Collaborate are surfacing and being trialed by university staff. It is envisaged that successful case studies will be captured and shared among the Curtin community via the 'Showcase' section of the Curtin Teaching and Learning website (<http://blogs.curtin.edu.au/cel/showcase/>).

With the release of a mobile version due later in 2012 the accessibility and adoption of virtual classroom software is likely to increase dramatically. Along with the implementation of mobile access, Curtin also intends to investigate the introduction of Blackboard's Instant Messaging system which connects directly into Bb Collaborate and the LMS.

Author contact details:

David Spann, d.spann@curtin.edu.au

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