Innovation in learning and teaching – blended learning approaches

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Strategic objectives addressed:
1. Develop and implement three courses for a blended learning approach to learning and teaching.
2. Conversion of 36 lectures from 3 courses for blended online delivery.
3. Research, develop and implement online secondary learning resources to support the online lecture delivery.
4. Develop and implement appropriate architecture of the DLS system to enhance learning and teaching.
5. Develop and implement a nexus of theory and application related to a commercial environment (simulated WIL) appropriate for seminar delivery to the student.
6. Facilitating the use of technology in the seminar for students to source secondary data relevant to the learning objective.
7. Develop and implement learning and teaching strategies that incorporate peer to peer learning via POD techniques and enabling large cohorts.
8. Develop and implement appropriate assessment tools.

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1 Executive summary

The needs of today’s students are evolving; as are the ways they seek out information. Delivering academic content online is becoming increasingly prevalent because the majority of students now turn to the Internet when learning about a new topic. This project aimed to bridge the gap between the classroom and the Internet by blending online lectures with face-to-face seminars.

A core element of the project was the conversion of lecture materials from three Fashion & Textiles courses into online video lectures. 12 videos were developed for each course, with the average duration of each video being 15 minutes. The videos cover the core theoretical components of a topic in a concise, visually appealing manner. Supporting content such as international lectures and recommended reading materials was posted next to the video lectures. Online quizzes were used to test student comprehension of materials.

The converted courses were delivered in Semester 2, 2012. Students participating in the courses watched a video lecture and support content each week via the RMIT DLS system. Students then attended face-to-face seminar in which they discussed and applied the theory to case studies via POD techniques enabling peer to peer learning.

The blended learning approach aligns with RMIT’s goals of being Global and Urban. Online content can be shared across campuses and geographies, thereby extending RMIT’s global reach. Online lectures are particularly appealing to students with English as a second language as they can rewind or re-watch the lecture as often as required. Material delivered online means less space required to service greater numbers of students. With urban populations increasing and space at a premium this is in line with RMIT’s goal to be urban in orientation.

2 Outcomes

The outcomes of the project were as follows:

- All three courses delivered in an innovative blended learning format during Semester 2, 2012
- 12 video lectures and secondary learning resources created for MANU2010 Production Management B.
- 12 video lectures and secondary learning resources created for MKTG1170 Fashion & Textiles Marketing.
- 12 video lectures and secondary learning resources created for MKTG1249 Fashion & Textiles Retail Management.
- Lecture videos for all three courses and secondary learning resources uploaded to the RMIT DLS system replacing traditional lectures.
- Weekly online quizzes created to test student knowledge, comprehension and progress against learning outcomes.
- Implemented the application of theory to a commercial environment appropriate for seminar delivery to the student
- Increased engagement of students, enabling peer to peer learning, large student cohorts and facilitating the use of technology in learning.
- Implemented appropriate assessment tools.
3 Project outcomes and impacts

3.1 Introduction

Education technology is a generic term, which captures a number of elements such as tools, blended learning, online delivery, technical support, and new software/technologies.

Teaching staff can make use of these technology tools for the development of an effective pedagogy, which meets the Universities Learning and Teaching objectives, (GTS, SES, and Internationalisation of curriculum etc.). The application of education technology practice allows for the development of innovative blended learning strategies.

We should harness the internet as an effective distribution channel of educational materials. Indeed RMIT explicitly recognises the need to adopt new teaching techniques in the Red Paper Strategic Plan 2011-2015 P17:

"Excellence in learning and teaching means commitment to regular renewal of curriculum; experimentation with new teaching techniques; and reshaping learning and teaching spaces to build new practice and new experience for our students and staff". 

"Our learning and teaching requires sophistication, flexibility and experimentation in curriculum development and in pedagogy." Red Paper RMIT Strategic Plan 2011-2015 P17

Furthermore, a growing body of research suggests that students perform better when they can access online learning materials.

A 2009 study by the U.S. Department of Education found that; “Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction.” (Means, 2009).

The development of ‘on-line’ moves us to use technology tools to an integrated carefully designed and developed blended learning pedagogy. One must consider how to ensure teaching staff are properly trained in the use of such tools.

The following outlines the outcomes of the project:

3.2 Online Lecture Creation

The primary objective of the project was to develop 36 online lectures that could be used to deliver content to students via the Internet. The steps undertaken to create the lectures were as follows:

- Source existing content from lecturers
- Review, streamline and prepare content
- Redesign slideshows
- Record videos with professional voiceover
- Review all content with lecturers

These steps were completed in accordance with the project schedule. Appendix A contains screenshots of several of the videos. All videos can be viewed via the relevant courses in the RMIT DLS system.

3.3 Online Secondary Learning Resource Creation

Extensive research of existing online resources related to the lecture theory was undertaken identifying existing international lectures, reading materials and case studies to support the primary online lectures.
3.4 Online Lecture and Secondary Learning Resources Uploaded to the RMIT DLS System

After completing the online lectures and collection of secondary learning resources the next task was to upload them onto the RMIT DLS system. Considerable attention was paid to ensuring the materials for each course were laid out in a manner that is easily navigated. This step alone increases the student comprehension of what the learning objectives are for the course. See Appendix B for an example of how lecture videos and other content were presented on the RMIT DLS system.

3.5 Weekly Online Quizzes

A key challenge when posting course material online is ensuring students view them when required. To overcome this challenge, online quizzes were created to match with each online lecture. Students were required to watch the lecture, review secondary learning resources and complete the corresponding quiz before the seminar each week.

3.6 Courses Delivered in Blended Learning Format

After the online lectures and secondary learning materials were loaded onto RMIT DLS system we then proceeded to deliver the courses in a blended learning format.

This consisted of the student viewing online lectures and associated secondary learning resources. The student would then complete an online quiz before attending a face-to-face seminar.

In the seminar the student would apply the theory of what they had learnt online via a case study approach.

Delivering content in this format makes the face-to-face class time much more effective. Students get to class with an understanding of the theory to be discussed and teachers can assign relevant case studies for group discussion. This approach facilitated peer to peer learning via organising students into pods and teaching to large student cohorts.

In addition students was able access other technologies to research additional learning resources.

For the teacher, the role has changed from one of the traditional lecturer/tutor to one of a “student centred” facilitator of learning.

3.7 Implementation of Assessment

Continuous assessment was designed and developed via the weekly quizzes. This formative assessment approach is designed to inform the student of their progress against learning outcomes. Assignment and case studies were designed so as the student could demonstrate their attainment of learning outcomes.

3.8 Increased Engagement of Students

Student response to this blended learning format has been very positive. Based on feedback from students we are confident that the online lectures increased student engagement across the three courses. The format also gave students improved access to course content as well as creating more time for discussion between students and teaching staff.

4 Dissemination strategies and outputs

Two presentations were given to academic staff of the School of Fashion & Textiles to share the outcomes from this project. The intent of these presentations was to build the knowledge and capability of the academic staff to develop their own blended learning approach. In the presentations we discussed:

- The rationale for developing the blended learning approach.
- The process of developing online lectures with support materials.
• How to deliver in a Blended Learning format.
• Student acceptance of, and feedback on, the process.

A video presentation of the above showcase was also developed and can be made available for the RMIT Learning and Teaching website if desired.

Additionally, several of the video lectures can be made available for upload to iTunes and YouTube to promote RMIT University as a global leader in technology and design as well as a leader in Fashion & Textiles education.

5 Evaluation of project outcomes
A detailed survey was sent to members of the Project Team as well as other school members who were involved in the process. This survey explored the extent to which the Project Objectives, Outputs and Outcomes were achieved. This survey can be viewed at http://www.surveymonkey.com/s/DMF67KJ

2012 SES reports:  GTS
Fashion & Textiles Marketing  81.4%
Fashion Retail Management  82.1%
Production Management B  64.3%

6 Budget report
What was the amount of funds approved? $54,450
What was the final amount of funds acquitted? $55,000
See attached acquittal of funds report.
References
Appendix A – Video Cover Shots
Appendix B – Sample Course Layout

Week 4 – Understanding Market Opportunities

Video Lecture

Porter’s Five Forces
This is an epic tale about one man trying to overcome Porter’s 5 forces in order to enter the rubber duck industry.

Porter’s Five Forces

Additional Resources
Download a PDF version of the video here: MEA-video.pdf

Week 4 Test
This is the weekly multiple choice test that contributes towards your total mark for the semester. It will be available until the time of your Week 4 Tutorial.