Responding to learners' need for choice: Flexible learning modes for creating an e-learning community

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Students need to balance work, family, and their university learning. In an effort to manage these conflicting demands, students make pragmatic choices which can lead to almost empty lecture halls and tutorial rooms by mid-semester. In response, this action research project piloted an e-learning portal for criminology students in 2006. Four courses were delivered by two different flexible learning modes, across 2 different levels of students. Early results indicated no difference in learning outcomes for either less experienced learners (second year level) or more experienced learners (third year level). High levels of satisfaction with online teaching were found from both student groups in either flexible learning modes. High levels of satisfaction in student learning were evident from experienced learners with less robust levels of satisfaction with their learning from less experienced learners. As this project is driven by a cycle of evaluation and then action, adjustments were made in flexible delivery modes for less experienced learners in 2007. For 2008, this e-learning project intends to build a community of learners for the criminology student body. Methods and measures are discussed, as well as implications.

Keywords: flexible learning, e-learning, sense of community, building community, criminology

Introduction

Across our universities in Australia, student attendance on-campus at lectures and tutorials decreases as the semester progresses. Students are making their own decisions about how to learn and it is not by our traditional 13 week by 3 hours on-campus model. Many course coordinators respond by increasing penalties on non-attendance – but, as a criminal psychologist, I know punishment doesn't work.

Students are busy. According to a recent report published by the Australian Vice-Chancellors' Committee (James et al., 2007), 70.6% of full-time undergraduates reported working during semester in 2006. On average these students worked 14.8 hours per week, however 19.4% worked 16 to 20 hours per week. For part-time students, 41.8% were in full-time employment working 38 hours per week or more. Work pressure, or financial pressures are a reality for students, as is family commitments. The report also cited 2005 statistics from DEST (Department of Education, Science and Training) that informed us that 40.6% of Australian students were aged 25 and above. Consequently, work and family commitments are creating competing pressures on students, who are requiring more flexibility in their learning, in ways that fit in with their work and family commitments (McInnis &Hartley, 2002).

Aside from student requirement for change and flexibility in their learning, we need to take heed of the known limits of traditional teaching delivery methods. As taught in undergraduate psychology courses, we know humans have on average, a 20 minute concentration span. This simple principle runs counter to our demands that students must sit through a 2 hour lecture, and we expect them to concentrate. Aside from our concentration abilities - as a pedagogical technique, the lecture-tutorial examination model shows ambivalent results as a means to stimulate student learning (Laurillard, 2002; Phillips, 2005). Further, as an outcome measure – employers have not been very impressed with the skills of our graduates who have gone through this traditional learning process (DETYA, 1999).
Hence, the development of this project, *eLearning for Social Sciences,* was a response to student requirements, but was also designed to increase student engagement, to enhance student presence, and to decrease absenteeism in students. This required significant re-development of four Criminology courses

from traditionally delivered courses to flexible learning courses, and then transported onto a web-based portal for flexible delivery titled 'CriminologyOnline'[1]. The effort required to transform course content and delivery mode should not be under-rated. Simply transferring traditional teaching methods and course material structures into an eLearning environment has been found to be ineffective (Phillips, 2005; Serwatka, 2002). A more student-centred pedagogical approach needs to be taken and materials and activities need to be re-designed accordingly.

Iterations of flexible learning

In this project, each of the four criminology courses were transformed from traditional lecture, tutorial and examination models, into two varieties of flexible learning. Each of the varieties of flexible learning were trialled over the year with both third year students (more experienced learners) and second year students (less experienced learners). The two iterations of flexible learning comprised:-

Flexible learning mode-1:
a. Self-directed online learning materials
b. Three non-compulsory oncampus seminar blocks (start, mid and near the end of semester)
c. Weekly oncampus tutorial sessions – non-compulsory
d. Intensive web based support (i.e., CriminologyOnline portal & 'Riverbend' a virtual city [2]).

Flexible learning mode-2:
a. Self-directed online learning materials
b. Non-compulsory oncampus 13 weeks X 1 hour lecture, and 2 hour tutorial
c. Online options - online recorded lectures (mp3 format), weekly power point slides, self-directed tutorial work
d. Intensive web-based support (i.e., CriminologyOnline portal)
e. An increase in online assessment (e.g., online multiple choice tests, online debate, agora postings, online question and short answer tests).

The four criminology courses were then distributed across the academic year as displayed in Table 1 below.

Table 1: Flexible learning distributed in second & third year criminology courses (2006)

	Flexible Learning Mode-1 Semester 1, 2006	Flexible Learning Mode-2 Semester 2, 2006
Second Year Students (Less Experienced Learners)	CRIM2040 Gangs & Crime n=23	BESC2003 Drugs & Everyday Life n=52
Third Year Students (More Experienced Learners)	CRIM3001 Community Crime Prevention n=21	CRIM3002 Victimology n=23

This spread of more experienced learners, and less experienced learners over Mode-1 and Mode-2 flexible learning, allowed for comparisons to be made on measures of student outcomes, student satisfaction with their learning, and student satisfaction with teaching.

Evaluation

Changes in the delivery of courses, and changes in student assessment within each course, needed to be calculated and cautious. The reasons for caution were twofold – first, to ensure the quality control of education delivered, and secondly to maintain students' confidence in their learning experience. Equally, evaluations needed to be meticulous and deliberate to ensure quality, and to 'determine what worked, and what didn't work'. Three key questions were identified in this evaluation.

Q 1: Does Flexible Learning affect student learning outcomes?
Q 2: Does Flexible Learning affect student levels of satisfaction with their learning?
Q 3: Does Flexible Learning affect student levels of satisfaction with teaching?

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[1] See CriminologyOnline at – http://criminologyonline.swahs.uq.edu.au
[2] See Riverbend at – http://riverbend.swahs.uq.edu.au

Student learning outcomes were measured by aggregating final student scores and comparing to final student scores in 2004 and 2005. Students levels of satisfaction with their learning, and satisfaction with teaching were measured by specific sets of questions in standardised university surveys (i.e., iCEVALs, TEVALs) conducted at the end of the semester and completed online through the Criminology Online portal. Additionally, students were asked supplementary questions about their preference for online learning and online assessment tasks. The response rate to the online questionnaires ranged from 50% to 60%.

Results indicated that there was no change in student learning outcomes, (i.e., overall student grades) irrespective of flexible learning mode and irrespective of students' learning experience (i.e., 2nd vs. 3rd year students). More experienced learners (3rd year) were satisfied with teaching, and satisfied with their learning in both Mode-1 and Mode-2 of flexible learning. However, for the less experienced learners (2nd year) differences emerged. For the Less experienced learners in Mode-2, the satisfaction levels with both their teaching (88%) and learning (89.3%) seem to reflect high levels of satisfaction. However, for the less experienced learners in Mode-1, student satisfaction with their teaching (90%) showed strong support, but student satisfaction with their learning (70%) was lower than in any other grouping. Whilst these figures by themselves are not particularly low, the trend does suggest caution may be needed with less experienced students if considering implementing a variation of flexible learning similar to Mode-1.

New directions

As a consequence of the 2006 evaluations, changes were made to the delivery of the courses for less experienced learners – i.e., in 2007, this group will be shifted to Flexible Delivery Mode-2. Conclusions cannot be drawn on the reasons for this group's lower satisfaction with their learning (70%) in comparison with all other groups. However, one can hypothesise that inexperienced learners need to be gradually introduced to self-directed online learning, or alternatively, it may be related to the nature of the particular course (CRIM2040 Gangs & Crime). These issues will be further examined when 2007 evaluations are conducted to test for this cohort's satisfaction with teaching, their learning, and attitudes to the online learning experience in the Flexible Delivery Mode-2.

New directions will always emerge – particularly in this project as it is steeped in an action research process of implementation, testing and reflection. It is an ongoing cyclic learning process. From the 2006 results we can be reasonably confident that students are satisfied with their learning, the teaching, and the online environment, and very confident that student outcomes are not compromised. Consequently the development of the online learning environment can move in the direction of strengthening the student experience and socially-based student engagement. Pedagogical research provides strong arguments for the necessity to build a sense of community as the first step for collaborative learning in an online setting (Rovai & Wighting, 2005; Wegerif, 1998). The importance of a sense of community seems to be related to enhancing learning, as students with a high sense of community are more likely to persist with their learning (Rovai, 2002) and have higher ratings of course satisfaction (Tinto, 1998). Those with low sense of community were found to have feelings of alienation, and cumulate in low retention rates (Rovai & Wighting, 2005). Clearly this is an important concept to investigate to further enhance the student learning experience.

This notion of 'building', or 'developing', or 'constructing' an e-Learning Community is extremely pertinent, as community is unlikely to develop by "…simply employing the software and hoping that conditions conducive to the formation of community will develop" (Brook & Oliver, 2003, p. 5). Consequently, a Sense of Community (SOC) will be 'built into' the teaching and learning processes within the e-Learning environment of CriminologyOnline. There are four elements of Sense of Community which we aim to operationalise into measurable elements. These include 1) Membership, 2) Influence, 3) Integration and fulfillment of needs, and 4) a Shared emotional connection (Chavis, Hogge, McMillan, & Wandersman, 1986; Forster, 2004; Long & Perkins, 2003).

The new direction for this project is to design these conditions into the CriminologyOnline e-Learning environment and to use various quantitative and qualitative measures to evaluate students' sense of community and the impact of the design on student learning, engagement and satisfaction. This design will extend the current learning options available to students by utilising new and emerging technologies that may enrich student social interaction.

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