Abstract: A systems view is taken of curriculum development in business education in order to assess the way in which Interact, the CSU online teaching and learning system, impinges on the curriculum. An examination of the history of the development of distance education reveals that there are three phases. All three forms are in evidence in the use of Interact. Moreover, the style of approach taken by the lecturer to the use of Interact, for example the extent of two-way communication, clearly affects the way in which the curriculum needs to be developed and presented to students. Also influential are learning styles and what students want or expect from Interact transactions. The paper attempts to assess progress so far and what this has meant (and will likely mean) for development of the curriculum.

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Curriculum Implication of the Introduction of Interact

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Abstract

A systems view is taken of curriculum development in business education in order to assess the way in which Interact, the CSU online teaching and learning system, impinges on the curriculum. An examination of the history of the development of distance education reveals that there are three phases. All three forms are in evidence in the use of Interact. Moreover, the style of approach taken by the lecturer to the use of Interact, for example the extent of two-way communication, clearly affects the way in which the curriculum needs to be developed and presented to students. Also influential are learning styles and what students want or expect from Interact transactions. The paper attempts to assess progress so far and what this has meant (and will likely mean) for development of the curriculum.

Introduction

Since the introduction of Interact at Charles Sturt University in 2007, much pioneering work has been proceeding to use this teaching and learning tool to the full. There are examples demonstrating these advances on the CSU web (http://www.csu.edu.au/division/landt /interact/staffsupport/examples.htm). These all point to a vibrant community of scholars pursuing an activity that they regard with the highest esteem.

In an attempt to place some structure around these developments, the current paper adopts a systems approach to flexible learning to classify the continuum of major advances. Then this is applied to subjects in the Faculty of Business to assess progress to date.

A Systems View of Distance Education

In terms of a simple definition, distance education involves learning in a different location from teaching. It therefore requires the transmission of information, by various means, from one place to another. As we shall see it is the revolution that is taking place in this communication process that creates new opportunities for distance education and flexible learning.

Figure 1 shows the components of distance education. It presents a model for analysing change. Historically, one can distinguish three phases of distance education. The first, study by correspondence, commenced in the mid-1800s, with the introduction of reliable, cheap postal deliveries. This led to the introduction of university distance courses at the end of the nineteenth century.

Phase 2 was heralded by a technology shift to delivery, involving radio and television broadcasting, and teleconferencing. This enabled the establishment of the Open University in the UK in the 1970s.

Then a further technical development involving communication via the Internet, has produced, in phase 3, another shift in the method of course delivery. The essential advance embodied in phase 3 is the potential to utilise the experience of students in the learning process by setting-up various online communication methods back from students to the lecturer and among students.

[Figure 1 about here]

To think of these changes as merely different methods of delivery – mail, broadcast, Internet – is to miss the point of the change. Those distance education providers who still attempt to use web-based communication to deliver what are essentially phase 1 correspondence courses have overlooked the adjustments that must be made throughout the distance education system to make optimal use of the introduction of online delivery. For example, the philosophy can become much more learner-centred, the learning environment much more flexible, and the role of the instructor can change from teacher to advisor. Indeed to take the greatest advantage of the shift to phase 3, all the components of the system of Figure 1 should be adjusted.

Adjusting the System

Some educational providers have been delivering a phase-3 type of distance education for more than a decade (Dixon 2001). The following description of an MBA course from the University of Guelph developed in 1999 provides a demonstration of phase 3.

Delivery was entirely online and asynchronous. The teaching term for a subject was segmented into periods of one or two weeks during which an assessable activity was completed. Such activities consisted of either an individual assignment, a group assignment, a discussion group, or a debate. Each of these activities had its own web space. Hence during the weeks of an individual assignment, each lecturer and student could communicate through the type of channels available through CSU Interact. In the weeks of a group assignment, additional space or sub-forums allowed each group of three or four students to communicate privately from the rest of the class. Both individual and group assignments were submitted online. The weeks of a discussion group required additional sub-forums for each discussion group of between six and eight students. Each group discussed the topic independently of the others. The contribution of each student to the discussion was assessed. The discussions of each group were summarised and distributed to the class during the following week. Finally, some subjects were set-up to include debates. Again additional sub-forums were used. For the period of the debate these sub-forums were open to different students sequentially.

Effective development of this mode of teaching and learning meant that many changes had to made to the system shown in Figure 1. Moreover, the steps in delivery had to be well tried and tested before the system went live.

Noting that for most students the learning environment was either the workplace or the home (or both), this meant that all aspects of delivery and interaction had to be designed to fit this learning environment. Hence delivery was established through online computer networks. Instructors had to be available to interact with students in a workplace and/or home environment. This could not easily be achieved through synchronous communication so an asynchronous method of communication was adopted. In the event there were considerable unforseen benefits of this asynchronous communication, for example in the form of focused, high quality messages between instructors and students and student-to-student. Barnes (2000) would have anticipated that better individualized instruction would result from Phase 3 online delivery. In a similar manner all the other components of the system of Figure 1 were adjusted. Not least of these adjustments was the amount of student-to-student learning that was occurring.

In the process of design and in the initial stages of delivery there was considerable learning and adjustment by the lecturing staff about this web-based education system. The objective for them was to supply a product that was a best fit for their clients.

Student-influenced Curriculum Development

Another aspect is curriculum development that takes place as communication from student learners becomes a larger component of the teaching and learning process. In the tension between curriculum, delivery and technology, students become active participants in curriculum development (Gerber and Scott 2007). This participation by students can be purposeful or incidental. As a purposeful action, students can express their views about the subject content either during the progress of the online subject, or once the subject is complete. Incidental curriculum development can take place as a student develops ideas for an asynchronous online class discussion or group assignment.

During a group assignment, a lecturer made the error of not providing the class with enough information to complete the task effectively. Part way through the week as the discussion among the participants of each group was proceeding, the lecturer realised this. However, the lecturer observed that one group had filled the void by searching the web and discovering information not unlike that which had been omitted. A choice was presented to the lecturer: (a) step in immediately, apologise and provide the information that she had intended to provide at the outset, (b) provide a hint that the groups had a problem because of the information deficiency, and that they should do something about finding the information, or (c) do nothing in the anticipation that because one group had solved the problem, the others should also be expected to. Which choice was made would imply something different about the way in which the curriculum was being viewed. Choice (a) suggests opposing the moulding of the curriculum by students. From this perspective, student views are considered "individual differences that must be addressed in order to reach a pre-set target" (Gerber and Scott 2007, p.463). Choice (c) implies the opposite. This choice characterises the tension between a teaching curriculum and a learning curriculum (Lave and Wenger 1991).

What determines the extent of student-augmented curriculum development that we should allow? This is an age-old question in a university environment where students are learning to learn. There are clearly many dimensions to the answer. In many business subjects (the author's teaching context), the curriculum is fairly flexible, and open to enhancement by students, especially where those students are themselves experienced business managers. In other subject areas (perhaps science) there is a definite path that the curriculum must travel.

Also, the scope for curriculum development in this manner is dependent on the skill sets and attitudes of both the lecturer and the students. With respect to the individual learner in the knowledge-based economy, there is a move towards students taking responsibility. They have access to much more information now and are actively constructing their own knowledge base. The emphasis is on analytical ability often related to complex tasks rather than just the accumulation of information. There is a demand by students for more problem-based learning, in which the learners (often as a group) search for their own answers to more open-ended questions. While these are trends in both distance and non-distance education, the use of the Internet has permitted more rapid change in distance learners.

Where the learners are also managers of their business organisations, the shifts in the construction of learning accord well with the shifts that are taking place in the work environment. One example is that managers are tending to become more independent, self-organised individuals, even though teamwork is a common feature (Green 1997). Table 1 shows the types of shift that are taking place. The current situation is described by the terms: lifelong learning, teams, ecologically sound growth, etc.

[Table 1 about here]

CSU Interact – Faculty of Business

To examine the progress on the issues of a systems approach to flexible delivery and learner-centred curriculum development, the Interact sites of undergraduate subjects in the Faculty of Business were examined. This revealed that the majority of staff have their distance education subjects designed and delivered in phase 1 mode. A few have included advances such as voice-over-Powerpoint presentations, that can be regarded as phase 2. From 35 subjects in Spring semester 2008, seven subjects could be regarded as approaching a phase 3 mode of delivery. They had a requirement of active participation by students in forum activities and of these two had some assessment based on student contributions to the forum discussions. In another two cases, subjects were organised so that separate student groups had their own sub-forums.

Conclusions

A systems view of flexible learning suggests that business is an area of university study that would benefit considerably from the utilisation of student experience both in online classroom space and in curriculum development   After reviewing this process and proposing a system of three phases, the current paper presents an examination of progress across these three phases in the Faculty of Business. This reveals that while individual subjects have progressed far, overall the flexibility that Interact offers has not been utilised significantly. Most subjects remain at Phase 1, some are using Phase 2 methods to good effect, but only about 20 per cent have active input from students. There are a number of researchable issues that occur as a consequence. An overarching one is: What are the constraints to more effective use of Interact?
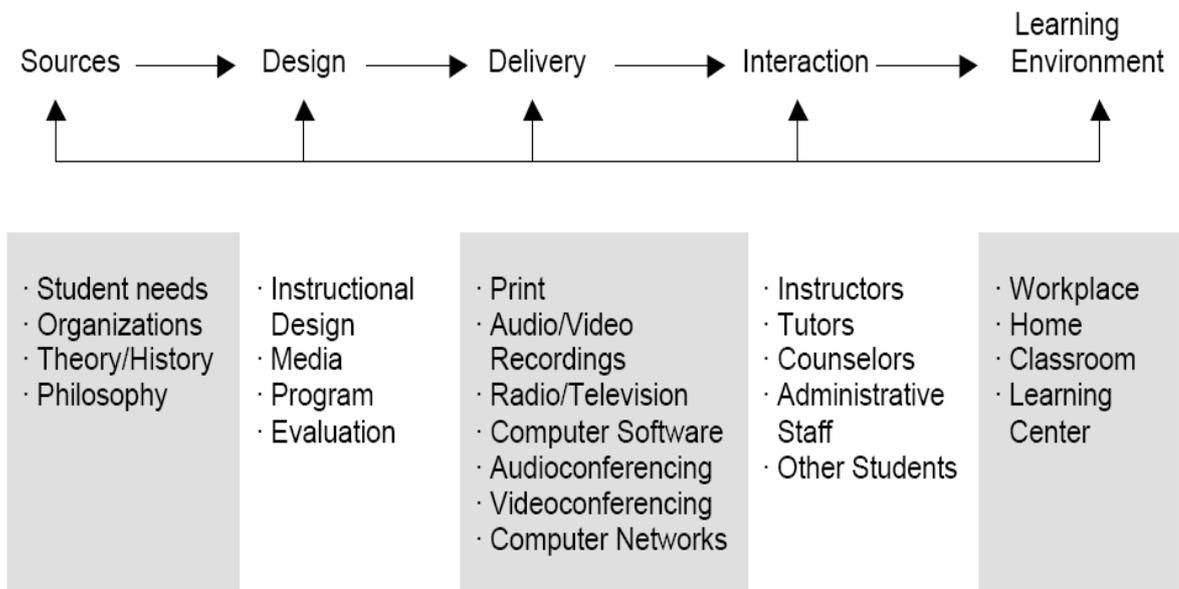
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Table 1: Shifts in business economy

Old Economy	New Economy
Individual skills acquired	Lifelong learning
Labor versus management	Teams
Business versus environment	Encourages ecologically sound growth
Security	Risk taking
Monopolies	Competition
Plant and equipment	Intellectual property
National	Global
Status quo	Speed, change
Top-down	Distributed

Source: Berge (2001, p. 22)

Sources → Design → Delivery → Interaction → Learning Environment

· Student needs · Organizations · Theory/History · Philosophy	· Instructional Design · Media · Program · Evaluation	· Print · Audio/Video Recordings · Radio/Television · Computer Software · Audioconferencing · Videoconferencing · Computer Networks	· Instructors · Tutors · Counselors · Administrative Staff · Other Students	· Workplace · Home · Classroom · Learning Center

Source: Moore and Kearsley (1996).

Figure 1: A systems view of flexible education