Flexible delivery: Convergence and quality in model redesign

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***Abstract**: As part of a 2001 Central Queensland University Focus Grant, the authors examined the effectiveness of two flexible/online delivery models used in two schools with the Faculty of Arts, Health and Sciences. The aim was to examine and evaluate the different approaches, and explore the possibility of developing a future hybrid model that would meet the needs of students studying in both Schools. This paper reports the preliminary results of this research: the School of Social Work and Welfare Studies flexible delivery model has been very successful and has a lot to offer the BAOnline model in terms of the constructivist teaching approach and the scaffolding and support provided to students. Whilst the School of Humanities model has so far met with mixed success, it does have curriculum design and content development possibilities to offer the Social Work model.*

***Keywords**: flexible delivery models*

Introduction

As part of a 2001 Central Queensland University Focus Grant, the authors examined the effectiveness of two flexible/online delivery models used in two schools with the Faculty of Arts, Health and Sciences with a view to examining and evaluating the different approaches, and exploring the possibility of developing a future hybrid model that would meet the needs of the cohort of students studying in both Schools. The two models examined were the BAOnline model, used by the School of Humanities, and Community Learning Model (aka Flexible Delivery model), used by the School of Social Work and Welfare Studies. This paper reports the preliminary results of this research.

Theory versus current practice

Theory

One of the main aims of the project was to evaluate existing models in the light of contemporary constructivist theories, particularly as these relate to online learning

environments. Oliver and Herrington (2001) provide a useful framework around which to design an effective online learning environment, defined as "a setting in which learning takes place," and which "typically contains the learner and a space where the learner acts with tools and devices to collect and interpret information through a process of interaction with others" (p.14).

Learning environments that support knowledge construction typically have many of the following characteristics:

1. Learning is active and engaged where, working from their own prior experience, learners are expected to construct their own knowledge, within given parameters using multiple perspectives through social interaction and negotiation with others.
2. The reasons for learning are embedded into the learning activities which are themselves embedded into authentic, realist and relevant contexts, thereby linking learning rationale with both real-world experience and skills that are transferable beyond the learning environment, and into workplaces and other post-study settings.
3. Learners may be scaffolded initially in a variety of ways, but the object of the instructor, eventually, is to disappear from the learning equation, thereby encouraging, through, among other things, reflection on the knowledge construction process itself, both independent higher-level thinking functions and life-long (learning and problem-solving) skills in the learner. (Oliver & Herrington, 2001, Dooley, 1997)

For Winn (1997), who supports this sort of learning environment, a good model of student learning will be consistent enough to allow new information to be interpreted, but flexible enough to adapt to new interpretations. It will also be sufficiently abstract to apply to a large number of cases, and to allow students to draw inferences even though all the information is not available. It will allow speculation about the world and enable students to construct and test new hypotheses that then serve as new sources of information. It will allow students to describe what they understand to other people, and guide students where to look for information. Such a model requires a fashioning of knowledge that is active so that students can connect information with existing mental models and alter them to accommodate the information. Moreover, the social nature of knowledge construction must be considered and opportunities provided for students to interact with other students, teachers, or other members of the community (p.3-4). Neither the BAOnline nor the Community Learning models fully utilise these characteristics at present, though each supports the general direction in different ways.

Current practice

The BAOnline model used by the School of Humanities attempts to mirror the critical thinking and analysis taught in many of its units through an evolutionary developmental process that uses, in the first stage, "page turning" online formats combined with discussion lists and other online support (e.g., see http://www.ahs.cqu.edu.au/humanities/litstud/52104; and http://www.ahs.cqu.edu.au/socwork/53110/index.htm). The initial phase has met with mixed success, and this has allowed for a re-evaluation of the online model from which it emerged. The School is looking to evolve into a second stage that takes advantage of the pedagogical re-design possibilities offered by other models. CQU has now, for example, adopted WebCT as its preferred course delivery mechanism, which has enabled staff to transform early online formats into more sophisticated models using the full range of the options that WebCT provides. As the shift to more specifically online options occurs, staff are re-examining the pedagogies used in teaching their particular disciplines, with many opting for a scaffolded transition into student-centred, constructivist learning models.

The Community Learning model used by the School of Social Work and Welfare Studies was founded on the principles of Problem Based Learning utilising a flexible delivery approach. This model aimed to capitalise on Dewey (1963), who proposed that learning is most effective when students are able to contextualise information and are able to learn in an environment where human relations are meaningful and purposeful, and on Barrows' (1999) model of social development through electronic communities and networks that go part way to meeting the needs of rural communities through flexible delivery models. Barrow's model of commonly based "information kiosks" seems to provide an opportunity to bring people out of their homes to access resources or meet other people rather than simply retreat to the PC screen, and his vision includes networking "schools, libraries, medical centres, community centres, or information kiosks" (p.5).

In its specific application, the School chose to incorporate Barrows' model for PBL, one whose key goals are:

1. The acquisition of a rich integrated knowledge base that can be recalled and applied in the context of future work.
2. The development of effective problem solving, self directed learning and team skills. (Barrow 1999 p.4)
3.

In its broad context, the flexible delivery model utilises two weeklong residentials in every year of the degree, and uses a diverse mix of technologies to engage in the PBL processes between these residentials: students are encouraged to use email networks, discussion lists, group based mailing lists, teleconferencing and videoconferencing to maintain contact with their learning group. Time is spent during residentials to ensure that students understand the processes and to deal with the "grief" that often accompanies the move away from the traditional learning mode. Students have been encouraged to remain in their own communities and to explore the pertinent issues as well as to utilise the resources available to them there to increase their knowledge base. They have also been encouraged to employ technology as a means of communicating to develop effective team and problem solving skills over what sometimes are great distances. These skills are regarded as particularly important for future social work practitioners in rural areas. Assessment includes both individual projects as well as group projects. Staff have a designated facilitator role and provide boundaries, resources, and input into the learning process.

Evaluation of the two models

Methodology

The research drew on recent commentaries on flexible learning models and, through focus groups and surveys with a cohort of learners drawn from each of the Schools, sought to establish attitudes to the two models. The methodology adapted to explore students' reactions and opinions was drawn from qualitative approaches. A questionnaire was developed using the literature available on the models in use, and from the responses to the survey, some themes were developed for subsequent follow up in focus groups, which allowed for discussion around specific issues, in the safety of the group environment, which generated descriptive information. The following provides a discursive summary of the results of both the focus groups and the results of the questionnaires.

1. Focus Groups

Method

The focus groups took the form of unstructured discussions (modified Delphi style) about the participants' experiences of flexible delivery of courses and problem-based learning. Three

focus groups were conducted involving twenty-three students who were currently enrolled in social work and arts undergraduate programs. Eleven second-year social work students were interviewed and twelve arts students. The first group of social work students comprised four female students, and seven students participated in the second group – four female and three male (these were in their second and third year of study). The group of humanities students comprised nine female and three male students; seven of whom were completing 2nd year, four completing 3rd year and one in his/her 5th year of study.

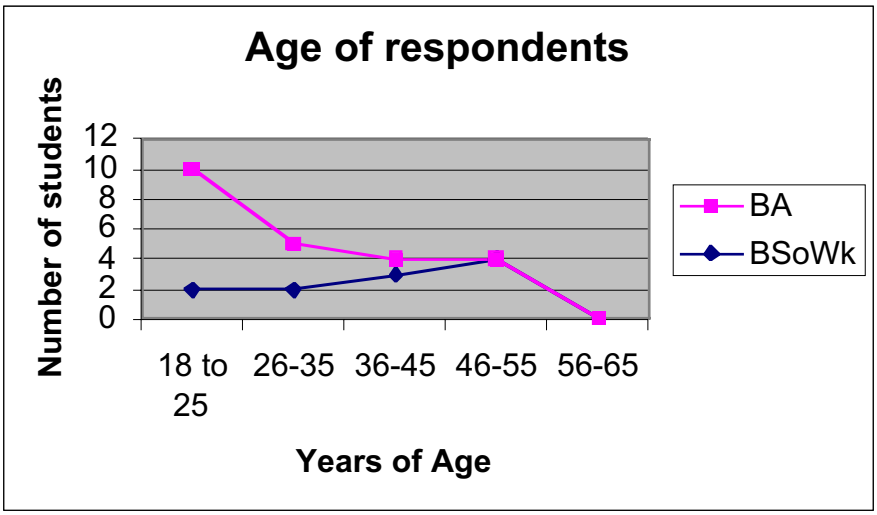

Figure 1: Age of respondents for focus groups

The age spread (Figure 1) suggests that the responses represent a variety of learning needs and styles. Participants from the Social Work program focussed on their experience of Community Learning (PBL). Students from the BA program focussed on their experiences of online learning.

Summary of findings

Many participants in each program believed that the university is using online teaching as a means of having less interaction with students. Online courses were an added expense to them in terms of the cost of information technology equipment or, alternatively, they were forced to access limited resources at the university. Groupwork is an integral part of the PBL curriculum and students of the Community Learning program viewed the experience as positive, facilitating communication and support among learning group members. PBL had engaged students in problem solving, conflict management and negotiation skills. Other participants felt that the process and delivery of PBL was too unstructured, without adequate guidelines for assessment.

Although students reported they had struggled with PBL in the flexible delivery mode, which has an emphasis on using information and communication technologies, they also expressed the view that PBL prepared them for the workforce. They were more self-directed and analytical and realised the value of PBL in many areas of their lives. Although students indicated that support was received from other students, they missed the face-to-face interactions and they felt geographically and socially isolated from the university and their peers. Most participants said that they had learnt new skills through having to complete tasks using information and communication technology for assessment purposes. Students commented that, at first, they had been reluctant to contact facilitators (lecturers). However, when they understood the role of facilitators in PBL, access became easier and they recognised

their responsibility in initiating contact. Social Work students saw their facilitators as 'mentors' as well as educators.

Flexible delivery was an unclear term for many students in both programs. Students enrolled in a Bachelor of Arts program do not encounter PBL in their courses and the focus of their group was on experiences of online learning. However, whilst students expressed a strong desire to have face-to-face contact with lecturers, they frequently found online material a valuable resource. There seemed to be an inbuilt notion of balance, as represented by the comments of one student: "I wouldn't like to do a course straight online because then you totally cut out the human element."

2. Survey

Method

Fifty students responded to the questionnaire (see Appendix A for a summary of the questions), thirty of whom were studying in the Bachelor of Arts program, and twenty in the Bachelor of Social Work program. Questions were designed to gain a snapshot of students using the two models, and gauge their responses to the learning styles involved, and to provide themes for the focus groups. A mailed questionnaire was used, and this has inbuilt limitations. However, the response rate was better than expected, and responses reflected a wide spread in terms of the age of respondents. Figures 2 and 3 provide a breakdown of age and program:

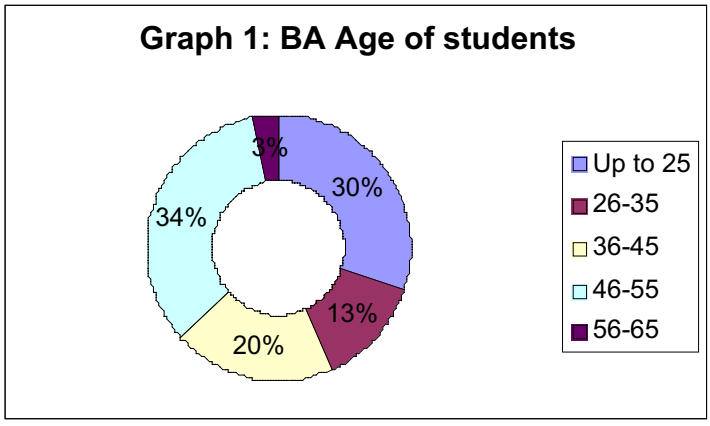

Figure 2: age of BA respondents

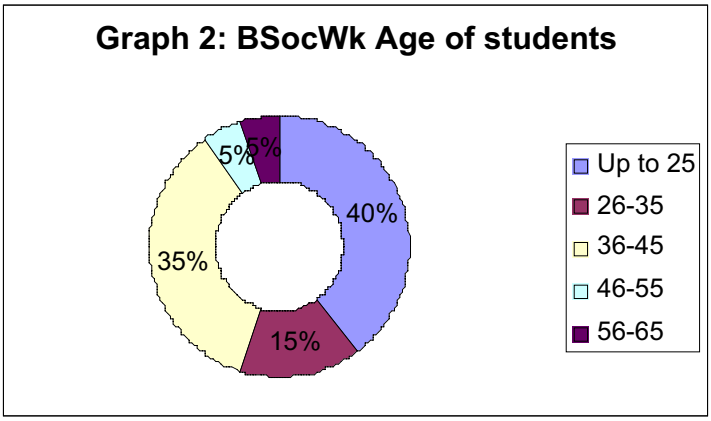

Figure 3: age of Social Work respondents

The majority of respondents for both groups came from the up-to-25 age group, with, interestingly, a much smaller proportion in the 26-35 age groups. There were also significant numbers above 36. As with the focus groups, the responses represent a variety of learning

needs and styles. The responses for BA students and Social Work students were collated separately. As students were not given a definition of online learning, problem-based learning or flexible delivery, their responses to the questions reflect their varied understandings and interpretations of these methods. The questionnaires were collated using Microsoft Excel and the qualitative information was grouped using common themes.

Summary of findings

Students were initially asked why they enrolled in online courses. Twenty-three percent of BA students enrolled by choice and 13% of this group felt that the online courses suited their personal circumstances which included full-time work or caring for a young baby. Most of the students (57%) said that they had no choice because the course was only offered online. The majority of the students enrolled in the program by choice (35%) and 30% chose this program because of personal circumstances that included work commitments and geographic isolation. In response to whether they were computer literate prior to commencing the degree program, 73% of BA students confirmed that they were. The students who considered that they weren't explained that they did not have the Internet connected or had problems accessing a computer and computer support. Among the students, 80% said they were computer literate at the beginning of the program.

Fifty-seven percent of BA students felt that they were "battling alone" while only 30% of Social Work students agreed. Respondents suggested strategies that would make a difference. Students preferred face-to-face contact (67% BA students; 75% BSoWk students) to be included in the course delivery. Most students expressed the view that technology did impact on their learning (83% BA students; 80% BSoWk students). To maintain their motivation to study, students relied on numerous strategies. These strategies included: feedback from lecturers, contact with other students, discussion lists, personal supports and personal goals, and self-discipline. Common strategies that encouraged students to feel part of a group are shown in Figure 4.

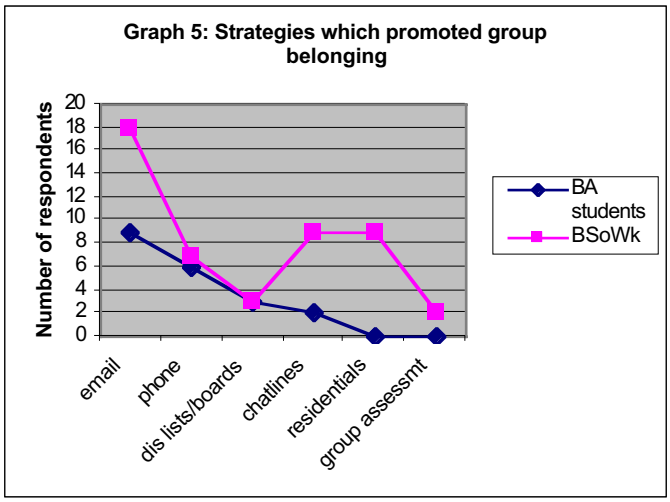

Figure 4: strategies that promote a sense of group belonging

Currently students in the Bachelor of Arts program do not generally experience PBL while those studying social work program encounter PBL extensively. Respondents were asked about their experiences of PBL and it was evident from the data that many students confused PBL with online learning. The social work cohort of students overwhelmingly said that they found PBL challenging. Over 90% affirmed that PBL provided them with opportunities for self-development and preparation for lifelong learning.

Common themes from focus groups and survey

Students rely on and appreciate feedback and support from lecturers. The issues highlighting the lack of support and feedback included lecturers not returning marked assignments, before the next assignment is due to be submitted. When online study is not supported by lecturing staff, and there is an absence of lecturer involvement, students feel devalued and isolated. In contrast, when lecturers were knowledgeable, professional, helpful and friendly, students felt encouraged and motivated. It was also important to students that assessment requirements were clear as they did not always have an opportunity to speak to lecturers. Students who were not computer-friendly viewed the computer as an obstacle to learning. They were frustrated by the "bugs" in the system, and the apparent lack of management of the technology by the lecturers. If these problems could be overcome, students felt they could get on with learning their course content rather than learning how to survive the technology. Students preferred a "mixed model" of course delivery that included an element of face-to-face learning especially in first year.

While the majority of students who participated in the focus groups value aspects of PBL/online/community learning, they strongly expressed the view that face-to-face interaction with other students and lecturers was an integral part of the study experience. They see online material as being most effective as complementary to interaction/discussion with lecturers, whether this contact is face-to-face, over telephone, or email.

Access to information and communication technologies was viewed as a major issue that students had to confront. Students cited the expense of buying their own computers and paying for Internet access, and the inconvenience and lack of university and community resources, as additional factors. A delay in receiving information and feedback from lecturers and other students via email and discussion boards was also a difficulty associated with online/flexible delivery learning.

Conclusion

The research conducted in this project has led to the following conclusions:

1. A recognition that strategies for online and flexible learning should be derived from principles of effective teaching and learning, not the other way round;
2. An understanding that change in pedagogical practice will only come with success, which means scaffolding and training both teachers and students in effective use of online technologies, flexible learning and PBL (that is, a lot of work has to be done getting the basics of course delivery right, including explaining the new methods and models to students);
3. A recognition that any hybrid model should operate with the successes of its derivatives whilst solving their difficulties with the situated context of the learners themselves;
4. An understanding of the need for both students and teachers to engage in learning re-engineering, which means exhibiting results and learning from past experience, a principle that should be applied both to the learning experience itself, and to its outcomes.

The next stage in this project is to use the findings of this first stage to propose a hybrid model that draws on the most effective elements of the BAOnline and Community Learning models.

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Appendix A: Survey Questionnaire

Part One: Individual Profile

Gender: ☐ Male ☐ Female

Age: _____

Postcode: _____

Program being studied: _____

Type of study: ☐ Full-time ☐ Part-time

Year of Program: _____
(e.g. 1st year, 2nd year, etc.)

Previous tertiary study: ☐ Yes ☐ No

If **yes**, briefly explain level achieved in course and name of program undertaken.

_____
_____
_____
_____
_____

Part Two

1. Did you undertake an online course by choice or were you forced into it by "circumstances" such as geography or work commitments and the like?

2. Were you computer literate before you began your present program? Yes/no

   If "no" what difficulties did you encounter in coming to this style of learning?

3. Which part of your current course makes you feel as though you are part of a group?
   1. Email
   2. Chatlines
   3. phone
   4. other (specify)

4. Do you feel as though you are "battling" on your own? Yes/no

   If yes, what would make a difference to this?

5. Given the choice, would you prefer face-to-face included with online support or are you happy with all online?

6. Does the technology impact upon your learning? Yes/no

   In what ways?

7. What problems have you encountered with learning online?

8. What features about this type of learning do you: Like/dislike

9. What keeps you motivated in this style of learning?

10. Where do you access the internet most frequently? (from 1 [most frequently] to 5 [least frequently])

    1. home
    2. university
    3. work
    4. internet café
    5. other (specify)

11. Which online tools (graphics, text, sound, etc.) best fit with your learning style?

12. If your study involves problem based learning combined with web based learning, is it:

    1. challenging
    2. confusing
    3. daunting

13. Does problem based learning provide you with:

    a) opportunities for self development? Yes/no
    b) assistance in self-directed learning? Yes/no
    c) good preparation for life long learning? Yes/no

    If "yes" to any of the above, please expand on your reasons for:

14. Is there anything you would like to add that is not covered in your comments to earlier questions?