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Mixed-mode Learning for Students of School Counselling

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In a core unit in the Queensland University of Technology's Education Masters degree, teachers training to become school counsellors are required to learn to assess children with learning and/or behavioural problems. Students enrol in the semester long unit in "block" mode, whereby face to face contact in the unit is limited to one block session of five days. After this period, they become distance learners, assessed by assignments due later in semester. This format poses pedagogical challenges. Deep learning, a desired student learning outcome, did not appear to be occurring. Furthermore, students felt isolated, in that they had lost the collegial support of the community of learners which they had formed during the intensive teaching block period. The goals of this educational intervention, were to engage students in deep learning throughout the semester and to extend the collaboration of the intensive block in a mixed-mode environment. To overcome these challenges it was necessary to design an authentic assessment task that would enhance the students' learning as well as provide opportunities for collaboration. This was accomplished by conducting assessment on-line with an authentic, collaborative task using videos, discussion lists and chat rooms.

Introduction

Capabilities of online technologies in the delivery of higher education have meant the adoption of online teaching in many universities (Barker, 2004). However, there has been in the past, a distinction drawn between distance learners (external students) who have primarily had access to these online technologies as opposed to those who have accessed learning face-to-face (Taylor, Pillay, & Clarke, 2004). With the exponential development of online technologies, the learning design options open to educators have expanded in a manner limited only by the time and money available to them, with many current programs now integrating both on-campus and online learning. These are often referred to as supporting

face-to-face teaching, web-enhanced teaching or blended or mixed-mode teaching (Barker, 2004).

Blended or mixed-mode learning environments combine face-to-face teaching with technology supported activities (Oliver, 2004). Blended or mixed-mode learning environments have been further categorized into hybrid or web-enhanced modes. A hybrid course has been defined as online learning replacing some of the face-to-face or in class time, while in a web enhanced approach the face-to-face time is augmented with learning online (MacEntee & Lewis, 2004).

The advocates of blended learning environments believe that there are pedagogical benefits in both face-to-face interaction (both among learners and between learner and instructor) and online methods. However, both learning environments have their advantages and disadvantages. The challenge for educators is to find the optimal balance between both the face-to-face and the online instruction (Christensen, 2003). As Ogusthorpe and Graham (2003) point out, “the important consideration is to ensure that the blend involves the strengths of each type of learning environment and none of the weaknesses” (p.228).

Accompanying these online opportunities has been a shift in emphasis from teaching to learning (Lewis, 2002); from students being passive recipients of knowledge to active student engagement in the construction of knowledge (Bonwell & Eison, 1991). Active learning is defined as any teaching method which involves students in an activity and thinking about that activity. Thus course design needs to focus on learners and activities not just content (Dillion & Zhu, 1997). These constructivist approaches emphasize that students “actively construct their own knowledge rather than receive preformed information transmitted by others” (Green & Gredler, 2002 p.4). Thus to apply knowledge and become competent in a field, students need to go beyond explicit information to construct experiential, implicit knowledge (Affleck & Smith, 1999) and develop a deep approach to learning (Prosser & Trigwell, 1999).

There are however, many challenges in implementing constructivist practices. Lecturers have to change their roles from telling to guiding and create rich environments to provide opportunities for students to make their own meaning. Students also have to change their roles and learn to think for themselves instead of waiting for teachers to tell them what to do. Teachers have to be able to work with general goals and cope with more diverse, idiosyncratic student outcomes, thus spending more time responding to individual student constructions (Burgon & Williams, 2003).

This paper examines the design process in creating a balanced blended learning environment for postgraduate students enrolled in a core unit (SPN612) in the Queensland University of Technology’s Education Masters degree.

Background and Rationale

In this core unit teachers training to be school counsellors learn how to assess students with learning and behavioural difficulties. This semester long unit is delivered in ‘block’ mode whereby the whole face-to-face teaching component is delivered from 9am to 5pm in one week during the school holiday period. The assignments, however, are spread over the semester. Thus, although the unit is considered to be internal, students experience both internal and external ways of learning.

This format poses pedagogical challenges. In previous years, deep learning did not seem to be occurring - as evidenced by the poor quality of the assignments. A contributing factor is the information over load that students experience when a semester’s learning is delivered in five days. Exacerbating these problems was the fact that information literacy training was not

embedded in the teaching in the block, but was presented as a voluntary add-on session. This meant that students already overwhelmed by five days of intensive learning had no time or energy left over to devote to acquiring the very research skills that would decrease their information overload. In addition, there was no specific support provided as the students became distance learners. Thus, as these students had no contact with the university during their assignment writing, many reverted to known, culturally embedded ways of assessing, using test batteries instead of the hypotheses driven approaches taught in intensive mode. Furthermore, they reported feeling isolated while completing their assignments, having lost the collegiality of the community of learners which they had formed during the intensive block period.

The goals of this educational intervention therefore, were to engage students in deep learning throughout the whole of semester and to extend the collaboration and camaraderie of the intensive teaching mode to prolong the learning.

Another significant desired outcome was a shift in students' perceptions of psychological assessment. The over reliance of some educational psychologists and school counsellors on using the Wechsler Intelligence Scales for Children to assess every child with any kind of difficulty, was a concern and a challenge. The perception, derived from a background in teaching, that psychological assessment must require tests, especially intelligence tests, or that an educational psychologist has to have a black bag of tests for every situation was not uncommon. Instead, the teaching objective was to encourage students to view assessment as the collection of data to make good decisions (Salvia & Ysseldyke, 2004). The process should be hypothesis-driven, with each hypothesis assessed for confirming or disconfirming evidence, to provide the best interventions for the resolution of the child's problem.

Method

A problem-based approach was therefore adopted for both the intensive mode and the online learning in the form of case studies. Problem-based learning changes the learning environment from a teacher-given, knowledge base to a student-centred approach in a social context where discussion and critical analysis are central (Segers & Dochy, 2001). A significant discussion component was introduced into the case studies in intensive mode and also online as it has been demonstrated that interactive discussions can be used to encourage active, meaningful and authentic learning (Dillon, 1994). This collaboration creating a community of learners is based on Kearsley and Schneiderman's (1998) engagement theory. This parallels constructivist theories and practices which shift focus from a 'testing' culture to an 'assessment' culture where there is an integration of assessment, teaching and learning, involving students in authentic, realistic tasks (Sambell, McDowell, & Brown, 1997).

Thus a mixed-mode learning environment consisting of traditional face-to-face teaching was extended by using an online, authentic, collaborative assessment task.

Case study in face-to-face environment

Pedagogically, the case studies needed to be authentic, reflecting a real life situation in the work of a school counsellor. As a result of the commitment to authentic assessment, experiential activities were chosen in order that students could practice logical assessment and research techniques. In the intensive block mode, students learnt about the different methods of collecting data - interviews, observation, records and psychometric assessment. They then participated in an all day, simulated exercise designed to enable them to use these data gathering methods in a hypothesis-driven assessment.

Four volunteer students role-played the parts of a Year 7 student, his mother, his father and his teacher. Each was given a role play card with the pertinent information about their character. These students met as a group to work out the logistics of their roles, but without disclosing certain information on their cards to each other. The rest of the thirty-one students were divided into four groups, as staff of four different primary schools, with the roles of principal deputy, guidance counsellor, learning support and classroom teachers.

Each group was told by the deputy principal that “Tom” in Year 7 had too many absences from school and the counsellor was asked to find out why this was so. Tom was the only one who knew that the real cause of his absences was separation anxiety disorder. Each ‘school’ could interview one of the four characters in front of the whole cohort. They were given time to discuss which person they would like to interview first and what information they needed. Each of the characters could only be interviewed once and all groups could make notes.

After the four interviews were completed, a debrief with the four groups was conducted about the order of the interviews, interviewing techniques and generating hypotheses to inform the questioning of each subsequent person. Groups were then instructed to find out what other information they needed for the case. The lecturer role-played any other person that the group wanted to question, such as a speech pathologist or a paediatrician.

Groups were then to make an intervention plan to encourage Tom back to school. The group plans ranged from sending the police to his home to rewarding Tom for attendance. When the class was informed that none of these intervention plans would entice Tom to school, a modified functional analysis was conducted by one of the students to visually incorporate all information and to generate all possible hypotheses for the case.

In addition, students practised giving unstructured interviews by interviewing each other on their research skills and degree of comfort with using online technologies. The 19 interview questions were grouped under the headings of Initial Inquiry, Searching Skills, Computer Skills, Referencing and Finding Help. This activity yielded two sets of useful data. It provided a training needs analysis the librarian used to design an information skills session later in the week, which for the first time was compulsory. In addition, it was useful as a ‘pre’ survey of technical skills, as one of the potential obstacles to the achievement in a mixed-mode environment is lack of student technical competencies. An important by-product was the opportunity for the students to practice the semi-structured interview as an assessment technique.

Building on the face-to-face case study, a similar case study was developed to be delivered online as an assessment for the unit. Even though in an ideal world mixed-mode learning is simultaneous because of the circumstances for this unit, mixed-mode environments were sequential.

Case study in the online environment

The online learning environment was provided by the Online Learning and Teaching (OLT) site at QUT. Similar in function to Blackboard and WebCT, the OLT site was developed in-house by the University as a means of sustaining the flexible delivery of learning. The OLT site for each unit can be customized using a range of online technologies, asynchronous and synchronous communication tools. The technologies provided opportunities to design online learning environments which could engage and facilitate communication between students and students and the lecturer and students, similar to the face-to-face environment.

To achieve the desired goals, it was necessary to design an authentic assessment task that would enhance the students’ learning as well as provide opportunities for collaboration. Logistically, the tasks had to be deliverable to distance learners. It was also necessary that the

technology be accessible to all participants and easy to use. Interactivity was an additional requirement, given that collaboration between students was an essential objective.

Videoed scenarios, a discussion forum and a chat room were used to deliver a second case study in online mode. A specially customised OLT web page ensured that the video and audio could be streamed to students at home. On the same page, a written transcript of the current clip was made available, as well as the discussion forum. Everything students needed to access the learning activity was on the same page. There was no necessity to download or install software or plug-ins.

Problem-based scenarios involving a counsellor and a troubled child, “Emma”, plus her teachers, parents and friends were filmed using amateur actors. These scenes were targeted, purposeful and real. Each scenario, and its transcript, was available online for one week only through the remainder of semester. Modelling school counsellors in practice, students were forced to rely on their impressions, personal and professional, and their notes of the interviews. In addition, a number of false leads were incorporated so that students would realise the complexity of assessing real life cases and gradually build their own construct of the assessment process. Using the online discussion forum, students were then required to research, reflect and collaborate online.

The format was similar to the face-to-face case study. The child was in Year 9 and self-referred to the school counsellor for subject choice. However, along with her expressed desire to get a job as quickly as possible, a range of “red herrings” were introduced. These included a bullying incident, an eating problem and a drop in grades, as well as possible anxiety and depression.

Six scenarios were filmed with interviews with the student and her friend, teachers and her mother. A discussion list was provided weekly for students to post their hypotheses and assessment, with the intention of providing a similar collaborative learning environment experienced in the intensive mode. A chat room was arranged at the end of the six weeks, with the lecturer again role playing any informant, such as the child’s friends or her mother or father.

The end result was a rich field of data for students to use to generate alternative hypotheses and demonstrate how they would assess the situation. Unlike the face-to-face case where there was a definite answer, the online assessment was left open-ended. A number of hypotheses could have explained the data. The intention of the case study activity was to assess the process, not find the answer. Feedback and scaffolding was provided online by weekly notices not only on the OLT site but also by weekly emails to all students. The librarian also joined in the discussion lists each week, providing scaffolding and feedback and answering questions pertaining to the case assignment. Bonus marks as well as assessment requirements were used to encourage students to learn online and to collaborate. Both from experience and research it has been found that students tend not to put effort into work that is not assessable (Boes & Wante, 2001). In addition, a student post-survey was completed and handed in with the case study assignment. The 16 questions included both open-ended and some rated on a scale of one to four. Some of these questions were similar to the pre-survey with some additional questions.

Results

Results were collected from the student surveys analysing students’ perceptions of the extension and enhancement of their face-to-face learning by the case study online. Thirty-one students began the intensive block; however four students subsequently withdrew from the unit. Twenty-four students completed the pre-survey and twenty-two students completed the

post-survey. This section presents the results of the surveys and lecturer feedback in a thematic sequence.

Students' perceptions of their learning

The majority of students (14) indicated in the post-survey that they learnt a lot from the online case study and that they enjoyed doing it, while even more (16) indicated that they felt that it prepared them well for assessing children in a professional capacity. A common theme that emerged in the students' free text was that the case study was a real life application of assessment of children. A typical comment was that the case study was "far more practical, gave ideas of what to expect in the real world of education" by modelling real life situations, providing hands-on practice, relevance, and providing a practical focus.

Students' perceptions of collaboration

Three questions in the post-survey asked students about their perceptions of the online learning experience in promoting collaboration. The majority felt that participating in the online discussion forum and then the chat session was a useful learning experience. Again the majority thought that the online discussion forum promoted collaboration between students. The majority of students (18) believed that participating in the online discussion forum for the case study was a useful learning experience for them. The theme of the comments was that the online discussion forum "allowed sharing of ideas and allowed for comparison of ideas". Four students felt that it was not a useful learning experience due to "too many different questions from too many different people".

Nine students thought that participating in the chat room for the case study was a useful learning experience citing reasons such as "exchange ideas – others bring new insights/ideas/questions that hadn't been thought of". However, five students did not feel that it was a useful learning experience, as they found the chat room very busy and confusing. Eight students were unable to take part in the chat room, three due to technological difficulties at home with the others citing other commitments which precluded their participation.

Fourteen students thought that the online discussion forum promoted collaboration between students as they were able to see what the other students were thinking, which helped them to clarify their own thoughts. Eight students did not feel that it promoted collaboration due to competition between students and a subsequent unwillingness to share ideas.

Students' perceptions of their learning through technology

There were questions in both the pre- and post-surveys which related to learning through technology. In the pre-survey conducted in the intensive block, students were asked how confident they felt about their computer skills in relation to searching for information for their assignments. Only three students indicated that they did not feel confident. In the post-survey, those three students stated that they now felt very confident or that they felt "more adept than when I started". In the pre-survey in the intensive block, students were asked whether they had ever participated in an online discussion forum or chat. Fifteen of the students had never participated, nine had participated, although for two of these the experience had been some time ago.

In the post-survey, students were asked how confident they now felt about using the online discussion forum and chat room. Five students reported that they were now very confident using these types of technology, and yet four of these students had never participated in this type of technology before. One of these students commented that "although it was daunting at first, after a couple of goes my confidence increased greatly". Thirteen students reported

that they now feel confident, although seven of these students had never used the technology before. Students' comments included "Being forced to use it, I have gotten over the fear of the unknown". Three students felt that they were still unsure about using the technology however, two of these students did not participate in the online discussion forum and all three students reported that they had been unable to participate in the chat room. One student did not complete this question.

Most of the students contributed to the discussion forum for at least four of the scenes, with the highest number of students (9) contributing for every scene. Two students did not participate in any of the discussion forums at all, despite the fact that weekly bonus marks were awarded for participation in the discussion forum.

Lecturer's perceptions of mixed-mode teaching

The lecturer felt that the major aim of the online environment in enhancing and continuing the learning was very successful. The assignments from the students showed that the hypothesis driven approach was understood and enacted upon by all the students. While there was still a wide spread of grades in the class, all students demonstrated at least a basic understanding of the process. The aim of promoting collaboration was somewhat successful. Despite the inducement of the bonus marks, some students were often not willing to share many of their thoughts on the scenarios, and there was not much learner to learner contact. The majority of postings to the discussion forum were from lecturer to learner.

Discussion

The aim of creating a blended learning environment which had an optimal balance between the face-to-face and the online, was achieved, although further development is required for the online component. This pilot study has been a useful learning experience for both the lecturer and the liaison librarians in the design, maintenance and evaluation of a mixed-mode learning environment. Students also reported that they felt the online case study enhanced their learning, which was supported by the assignment results. The collaboration between students was prolonged from the face-to-face experience by the use of the online learning environment. However, the nature of the online learning being assessment based also worked as a negative force by introducing a competitive element to the student interaction which hindered the desired collaboration. This issue will need to be investigated in the next iteration of this project. However, by providing discussion of the case studies in both the face-to-face teaching and online environments, students were able to participate fully in either mode. That is those who found it difficult in class, seemed to participate more fully on line.

The project also enhanced the collaborative partnership between the lecturer and the liaison librarians, particularly through the development of the pre-survey and the library research session in the intensive mode. Both reported that they felt more involved and more interested in the blend of the face-to-face and the online learning environments than they had in the previous structure of only face-to-face teaching. This was despite the online case study being both time consuming and expensive. Thus maintenance issues need to be taken into account in the design and redesign of learning environments and assessment.

The lecturer felt that the students had learnt the basic concepts of the unit at a deeper level than previous cohorts of students. Both case studies, delivered in a mixed-mode environment certainly reinforced the learning that assessing children should be a hypotheses-driven exercise rather than the test battery approach. The provision of weekly online scenarios ensured that all students had access to the same information so that the complexity of the case study was maintained.

The use of pre- and post-surveys were useful tools, both to model forms of assessment and also to evaluate student perceptions of their learning and the blended learning environment. The majority of students perceived benefits to using both the face-to-face and the online learning environments. Student confidence in using technology increased throughout the semester and was therefore not a barrier to online learning.

Limitations

There were limitations in both the collection of data in the pre- and post-surveys and the balance between the face-to-face and the online learning environments. The two surveys contained similar questions as well as some different questions. Some questions, which had been open-ended in the pre-survey, had rating scales applied in the post-survey. Care will be taken in the design of future surveys to ensure that the rating scales are identical and that there is a congruence in the questions used. The lecturer unfortunately has no opportunity though in the future to change the balance of the face-to-face and the online learning environments in that the one week intensive block mode is the only available face-to-face time-slot.

Conclusion

This paper analysed the success of a sequential blended learning environment from both the students' and lecturer's perspectives. The best features of face-to-face teaching were combined with the best features of online teaching in two engaging, authentic case studies where students collaborated to provide a deep learning experience on assessing children. In the future, documents would be provided for the online case study such as school documents, parental letters and agency reports to increase the authenticity of the case study. Furthermore, an opportunity to practice using the technology with a small sample case study would be provided in intensive mode to further enhance learning.

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