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Teaching and learning online for the first time:
Student and coordinator perspectives

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In recent years the higher education sector has moved towards the flexible delivery of individual units and entire courses. As a result, online delivery methods are becoming increasingly common. In this paper we describe students' and unit-coordinators' views concerning teaching and learning online for the first time in an introductory psychology unit. Using an action learning approach, views were ascertained through a focus group, messages posted on the online discussion boards, a survey, and coordinator reflections. The results indicate that the current online design of the unit does little to actively engage students in the learning process. We argue that transformation rather than adaptation of unit material to better suit the online environment is required. Facilitating the transformation of unit materials requires greater institutional support and ongoing professional development for teaching staff. In addition, it is recommended that a combined approach (online and face-to-face learning) may be more beneficial than online delivery only, especially for large undergraduate classes and during the transition year.

We teach in a time of greater need for flexible delivery methods (Kezar, 2000; Siragusa, 2002) such as the provision of the online mode of delivery. Uses for online delivery are varied and include providing all material online, pre-lab exercises to ensure students are prepared for their classes, integrating internal and external students (e.g., through online group projects), providing case studies to aid learning, and encouraging the development of learning communities and student connectedness through the use of bulletin boards and chat room facilities (Chittleborough, Mocerino, & Treagust, 2002; Oliver, 2002; Proctor, Knapton, Aldridge, & Fraser, 2002; Wood, 2002). However, the technology for online delivery is not sufficient by itself – educators need to build experiences and expertise as well as address learning theories and instructional design principles in order to be successful in web-based teaching and learning (Siragusa, 2002).

Advantages of online delivery include being able to provide students with immediate feedback on submitted work, access to other resources (e.g., Internet sites, music, pictures), encouraging the pre-reading of material, facilitating the development of computer and Internet skills, and greater flexibility than traditional delivery methods as students may study at a time and venue convenient to them (Chittleborough et al., 2002; Gaynor & Kessell, 2002; Proctor et al., 2002; Siragusa, 2002). A major challenge to the provision of online learning is the geographical isolation between students and coordinators, which can impede a more 'natural' style of communication (Gibbs, 1998; Ho 2002; Oliver, 2002; Siragusa, 2002; Wood, 2002).

Recent research in Western Australia suggests that students are generally satisfied with online delivery but there are some concerns such as peculiarities with online programs and platforms, knowing whether or not submitted assignments have reached the unit coordinator, and the students' computer or Internet literacy levels (Chittleborough et al., 2002; Gaynor & Kessell, 2002; Oliver, 2002; Siragusa, 2002). In addition, access to the sites and staying connected (especially in remote areas) may be problematic (Chittleborough et al., 2002; Gaynor & Kessell, 2002; Siragusa, 2002). Finally, the teaching institution may not always adequately support and encourage innovation for successful online teaching and learning (Murray, Combs, Aldridge, & Fraser, 2002; Proctor et al., 2002).

When we consider the current growth in online learning course enrolments, there is a significant number of students and coordinators who use online technology for the first time. Thus, in evaluating the success of the online delivery of units, there is a need to examine the perspectives of both the instructors and the learners (Siragusa, 2002). This paper describes the evaluation of an online unit where the unit coordinators and the students participated in online teaching and learning for the first time.

Preparation

Early in 2002, we completed professional development courses relating to online teaching and learning. These courses were provided by our university. Two of the courses were concerned with teaching and learning using the online platform used at the university. In addition, we completed a 6-week e-moderating course which required approximately 30 hours.

Implementation

The knowledge and practical skills obtained in these courses were used to develop and implement an introductory unit in psychology, delivered entirely online with Blackboard as the online platform. The unit was transferred from the external print-based mode to the online environment by us in conjunction with an Instructional Designer.

The unit is the first psychology unit in the psychology degree and was the first unit within the School of Psychology to run solely online. The decision to offer the unit in the online mode was made as part of the institutional push towards online learning. The student cohort is typically diverse and the unit may be completed by students majoring in psychology or by others who have an interest in the area. Psychology majors usually complete the unit in addition to a research methods unit in their first semester.

One hundred students enrolled in the introductory psychology unit in the second semester of 2002. Many of these students were commencing their first semester with the university as part of a mid-year intake of students. In addition, 25 of the students studying the unit were also enrolled on campus in the first year research methods unit. The first author coordinated the research unit, facilitating face-to-face contact with the 25 students also enrolled online in the introductory unit.

Evaluation

An action learning approach (McGill & Beaty, 2001; Weinstein, 1999) was used to evaluate the implementation of the introductory unit in the online mode.

Upon completion of the semester, student retention rates and grades were examined.

> In addition, student views were ascertained through three main methods. First, comments on the discussion boards were thematically analysed. Second, the views of the students who were also enrolled internally in the research methods unit were canvassed in a focus group. The focus group occurred five weeks into the semester and 20 of the students volunteered. Third, the students completed a survey which asked for their views concerning the online learning format.

Results and discussion

Grades

The examination of grades provides a useful tool to aid the evaluation of online units (Siragusa, 2002). The overall marks for the unit were examined and compared to that of the previous semester where the unit was run both internally and externally in a print-based format. The assignments were of the same format and contained similar questions, allowing for direct comparison. The table indicates that the number of students scoring High Distinctions and Distinctions were comparable across the three modes of delivery. However, fewer students earned Credits and Passes in the online mode than the previous semester's on-campus and print-based external modes. In addition, significantly more online students failed the unit. Many of the Fail grades resulted from non-submission of assessments and/or failure to sit the exam, rather than poor assessment grades, suggesting that the unit failed to engage the students rather that the unit being too difficult.

A comparison of grades between semester 1 and semester 2, 2002

Grade	Semester 1, 2002		Semester 2, 2002	Results of the online mode
	Internal n (%)	External n (%)	Online n (%)	
HD (80% and above)	18 (6.3%)	9 (8%)	6 (6%)	No change
D (70 – 79%)	61 (21.4%)	27 (23.9%)	23 (23%)	No change
CR (60 – 69%)	109 (38.2%)	37 (32.7%)	20 (20%)	Decrease
C (50 – 59%)	61 (21.4%)	22 (19.5%)	11 (11%)	Decrease
N (less than 50%)	35 (12.3%)	18 (15.9%)	40 (40%)	Increase
Total	285 (100%)	113 (100%)	100 (100%)	

Note: n = number of students.

Communication on discussion boards

By the end of the teaching period of 14 weeks there were a total of 141 messages posted by 29 students. Only 12 students posted more than one message. The majority of the students who posted messages lived in the north metropolitan area of Perth and six lived in regional areas. Four students who posted messages were also studying the research methods unit on campus. We believe that the small number of students posting messages may be attributed to the unit's lack of online activities, as accessing Blackboard was not necessary to complete the unit. To minimise the transition to online learning, all students received the Blackboard material in a print-based format upon the commencement of the unit. The decision to do so inadvertently led to Blackboard being underused, as the students received all the required materials.

Those that used the discussion boards introduced themselves, provided encouragement, and shared study tips with other students. Students also replied to other students, welcoming them to the unit and offering to support each other through their studies. The boards assisted initially in the formation of study groups, as students used the facility to locate peers in their geographical area. Not all students appreciated the online format. For example, a student commented that *"communication via computers really is not very personal"*. For non-local students, the boards reduced the isolation of studying. For example, *"I am really happy to find that I will not be so isolated after all. I look forward to getting to know all of you during the course of our studies"*. The opportunity to meet other students was seen as important. For instance, another student commented *"I think it will certainly make a difference doing an external unit where you can interact with the other students. This way we get the best of both worlds!"*

Focus group

The focus group highlighted a number of student concerns related to feelings of resentment. Students wanted personal contact with fellow students and staff but instead they felt the unit was impersonal. They felt the need to be connected was especially important as they were in their first semester of university study. Further, the students were angry that as the unit was offered only in the online mode. Many students reported that they would have preferred to study the unit on campus, had they choice been available to them. They felt as though they were in an *"experiment"* as they were aware that this was the first time the School of Psychology had used online delivery.

Survey

A questionnaire and a reply-paid envelope were sent to every student in week 12 of the semester. Only 21 questionnaires were returned, yielding a low response rate (21%). Seventeen of the respondents accessed the unit's online materials during the semester. All but one of these posted a message and all but two replied to a message. The student who did not post a message still benefited from the online medium; *"although I did not post a message, I did enjoy reading about other people's questions, which helped me throughout the semester"*. Eleven students reported they would like to do another unit online in the future. Those who did not use the online

facility cited reasons such as a lack of computer access and a knowing that accessing the online environment was not a requirement of the unit.

The students who preferred to study externally reported that they benefited from the online environment as it allowed 24-hour access to unit materials and timely feedback from the coordinators and other students. Those students who would have preferred to study on campus, had the option been available, described the unit as *"lonely"* and *"isolating"*. Almost all of the respondents students suggested ways to improve their online learning experience, such as the provision of some face-to-face contact for those students who are able to attend the campus to aid the development of study groups, consolidate their understanding of content and assessment, and to *"put a face to the name"* of the unit coordinators.

Retention

A preliminary retention rate was calculated based on the number of students initially enrolled in the unit and the number of students that who sat the exam. The retention rate for the unit was 62%, which is higher than most external units where retention rates are typically as low as 50% (Phipps & Merisotis, 1999). However, the retention rate was lower than usual for the unit when delivered externally in the print-based mode (around 70%). Although there are many reasons for non-completion of units, the low retention rate may be a result of the online mode of delivery. Although 25 of the unit's students were enrolled internally for the research methods unit, it appears that the contact was not sufficient to facilitate feelings of connectedness to other students and the coordinator of the online unit.

Coordinators' reflections

The online and e-moderating preparation courses were useful in terms of the coordination of an online unit, however, the online medium was not utilised to its capacity. Barriers to doing so included a lack of additional support in and understanding of online pedagogy to facilitate the successful transformation of the unit and the large number of students enrolled in the unit. There is a need to not only provide support in the training of academics before they embark on online teaching but also to aid their ongoing development and expertise in teaching online to ensure maximum learning opportunities are provided within the online environment. This is particularly so as the online environment is vastly different to the norm of face-to face teaching and the skills required for the online environment are different. Thus, there is a need to further develop an institutional culture that supports online teaching and learning (Kulski, Boase-Jelinkek, Quinton, & Pedalina, 2002).

The optimal class size for delivery of activities such as online tutorials, group discussions, and collaborative assignments is estimated to be between 10 and 20 students (Salmon, 2000). As a result of the unit's large enrolment, activities and group assignments were not provided due to the anticipated difficulty in moderating such activities. From a pedagogical perspective, the decision not to utilise such activities further resulted in the under-usage of the online platform and is likely to have negatively impacted on student learning. For example, the individual assessment meant that the students were not encouraged to engage or collaborate meaningfully with one another.

Conclusion

Whilst all attempts were made to canvas the opinions of all students enrolled in the introductory unit, the attempts were not successful. The views of the 'silent majority' remain uncertain. The experiences of the student cohort as a whole are thus difficult to determine. Despite this, we feel that some tentative conclusions can be made.

The current online design of the introductory psychology unit does little to actively engage students in the learning process. Merely transposing the print-based materials into the online environment failed to maximise the benefits of the online medium. A design that incorporates experiential and collaborative learning processes is essential as these processes contribute to learning outcomes (Kezar, 2000). In addition, it has been suggested that to achieve optimal outcomes, information must be redesigned rather than adapted to meet the specific requirements of the online environment (Campbell & Ben-Zvi, 1998; McLoughlin & Luca, 2001; Wolfe, Crider, Mayer, McBride, Sherman, & Vogel, 1998). The transformation of the unit to better suit online delivery will be challenging considering that approximately 500 students enrol in the unit in first semester and another 100 or more in second semester as part of the mid-year intake. The online environment is better suited to units with smaller enrolments than the unit it was trialled with in the School of Psychology.

Finally, the transition to university studies presents a potentially difficult adjustment for students (Pargetter, 2000). The online mode appeared to exacerbate the stresses associated with this transition. A combination of online activities with face-to-face components would enable students to participate in online activities suitable for larger classes which would offer opportunities for the revision of material, master classes, and idea generation (Salmon, 2000) while allowing students to feel connected to students, staff, and the university. Such a combination is especially useful for large classes (e.g., Coall, 2002; McKenzie, 2002) especially during the transition year, and is a recommendation from this paper.

References

Campbell, K. & Ben-Zvi, E. (1998). The teaching of religion: Moral integrity in a technological context. *The Internet and Higher Education, 1*(3), 169-190.

Chittleborough, G., Mocerino, M., & Treagust, D. (2002, August). *An evaluation of the introduction of on-line resources in a first-year chemistry course*. Presented at the Western Australian Institute of Educational Research Forum, Perth, Australia.

Coall, D. (2002). Student use of self-paced, interactive, computer-based learning resource in human biology. In A. Bunker & G. Swan (Eds.). *Focussing on the student* (pp. 51-57). Mount Lawley, Western Australia: Edith Cowan University.

Gaynor, I., & Kessell, S. R. (2002). The challenge of providing a truly flexible and totally on-line postgraduate programme. In A. Bunker & G. Swan (Eds.). *Focussing on the student* (pp. 109-115). Mount Lawley, Western Australia: Edith Cowan University.

Gibbs, W. J. (1998). Implementing on-line learning environments. *Journal of Computing in Higher Education, 10*(1), 16-37.

Ho, S. (2002). Encouraging on-line participation? In A. Bunker & G. Swan (Eds.). *Focussing on the student* (pp. 143-151). Mount Lawley, Western Australia: Edith Cowan University.

Kezar, A. J. (2000). *Higher education trends (1999-2000): Teaching and learning*. ERIC Clearinghouse on Higher Education. Retrieved from the World Wide Web on 4th April 2002. Available: http://www.eriche.org.trends/teaching.html

Kulski, M. M., Boase-Jelinkek, D., Quinton, S., & Pedalina, V. (2002). Strategic support for online teaching and learning. In A. Bunker & G. Swan (Eds.). *Focussing on the student* (pp. 137-142). Mount Lawley, Western Australia: Edith Cowan University.

McGill, I., & Beaty, L. (2001). *Action learning: A guide for professional, management, and educational development* (Rev. 2nd ed.). London: Kogan Page.

McKenzie, W. A. (2002, June). Using online discussion in teaching undergraduate psychology. *CAL-laborate*, 8-12.

McLoughlin, C., & Luca, J. (2001). Tasks for team building: Why online learning makes a difference. In M. Kulski & A. Herrmann (Eds.), *New horizons in teaching and learning: Responding to change* (pp. 109-122). Curtin University of Technology Centre for Educational Advancement: Perth, Australia.

Murray, K., Combs, B., Aldridge, J., & Fraser, B. (2002, August). *Investigating the integration of ICT into teaching and learning at Sevenoaks Senior College*. Presented at the Western Australian Institute of Educational Research Forum, Perth, Australia.

Oliver, R. (2002, February). *Should we make participation in discussions and bulletin boards in on-line learners' settings compulsory?* Presented at the Teaching and Learning Forum, Perth, Australia.

Pargetter, R. (2000). Transition: From a school perspective. *Journal of Institutional Research, 9*, 14-21.

Phipps, R., & Merisotis, J. (1999). *What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education*. Washington, DC: Institute for Higher Education Policy.

Proctor, D., Knapton, P. Aldridge, J., & Fraser, B. (2002, August). *Investigating the success of a grade 11 online nuclear physics program*. Presented at the Western Australian Institute of Educational Research Forum, Perth, Australia.

Salmon, G. (2000). *E-moderating: The key to teaching and learning online*. London: Kogan Page.

Siragusa, L. (2002, August). *Research into the effectiveness of online learning in higher education: Survey findings*. Presented at the Western Australian Institute of Educational Research Forum, Perth, Australia.

Weinstein, K. (1999). *Action learning: A practical guide* (2nd ed.). Hampshire, England: Gower.

Wolfe, C. R., Crider, L., Mayer, L., McBride, M., Sherman, R., & Vogel, R. (1998).Toward a Miami University model for internet-intensive higher education. *Journal on Excellence in College Teaching, 9*(1) 29-51.

Wood, E. (2002). A dilemma beyond discussion – increasing student interaction in external study modes. In A. Bunker & G. Swan (Eds.). *Focussing on the student* (pp. 153-157). Mount Lawley, Western Australia: Edith Cowan University.