

[P29] Evaluation of a blended learning approach to embed ethics teaching

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Keywords: blended learning, on line resource, ethics

Introduction

A number of drivers require the dissemination of ethics, for example the 'Biosciences Benchmark' document states 'students should be expected to be confronted by some of the scientific, moral and ethical questions raised by their study discipline'. Thus it is paramount that students engage with ethics and that tutors are enabled to support this. Our experience in MMU is that students vary greatly in their understanding of ethics. The implementation of a managed learning environment via Blackboard Vista has offered the opportunity to evaluate the student learning experience using taught postgraduate modules linked to a 'self managed' on line resource. This project was funded by MMU 'BIDS' Faculty Learning and Teaching Scheme.

Aims and objectives

The aims of this study were to evaluate the student experience of a blended learning approach, to elucidate the barriers to learning, and to feedback these findings to staff and students via the MMU virtual learning environment (VLE). This was achieved by:

- Use of a questionnaire to evaluate student's experience of the Ethics module
- Recruiting and interviewing a focus group of students from each elective
- Analysing the questionnaires and findings from the focus group
- Analysing student usage of files and tools on the VLE

Methods

The structure of the MSc Biomedical Science involves a mix of traditional lectures for the electives and a 'self managed' Ethics module delivered via the VLE. The Ethics module is generic in content but involves assignments based on the study of electives. Students studied by mixed mode and have no prior ethics teaching.

A questionnaire to evaluate the student experience across 5 different electives was designed and made available to students ($n = 41$) enrolled on the MSc Biomedical Science within the School of Biology, Chemistry and Health Science at MMU, via the VLE. Completion of the questionnaire was optional. A volunteer student focus group ($n = 12$)

underwent a structured interview (Krueger 1988) answering questions to record their experience of the blended learning approach used to teach the Ethics module. In addition, Blackboard Vista usage statistics were downloaded for analysis.

Results and discussion

Analysis of Blackboard Vista tools and files

Blackboard Vista enables the tutor to view and analyse student usage of the electronic learning material. The following data illustrate the student experience (n = 41) during a selected 8 week period. The end of the 8 week period coincided with an assignment hand in deadline. It was found that that the most accessed tools are the folders (49%) and files (30%). The majority of teaching and learning materials are housed in these folders and files. The least accessed tools were the mail and the media library (each <1%).

Usage of electronic files over 8 week period

The areas most accessed were the 2 examples of case studies (17% and 13%), the weblinks (13%) and the case study mark sheet (10%). The discussion board was accessed infrequently (7%). Analysis of usage showed that the Ethics on line resource was accessed at all times of the week and all hours of the day, although the pre-lunch period is most popular. The most active day was immediately prior to the coursework submission date.

Analysis of focus group interview

At the end of the module student volunteers were invited to discuss their experience of blended learning. The interview was based on 13 specific questions, and included general discussion of topics. A summary of responses follows:

- Distance learning/flexible mode of study was especially liked
- Access to the marking scheme was found to be useful
- Students were happy to access files randomly and to their own personal interests
- Traditional lectures would have been preferred by 2/12 students
- Access and choice of material was reported to be assignment and deadline driven
- Most students printed the handbook and teaching material (9/12)
- Sample case studies were considered the most useful files accessed
- Support sought with tutor was infrequent, support was sought via email or occasional tutorials. Some students experienced feedback from others via presentations on ethics topics within their specialism
- Use of the discussion board was limited, students felt there was nothing to discuss and initiation of discussion was lacking, they would use it if marks were assigned

Conclusion

Evaluation of the on line resource for teaching ethics has shown that the balance of e-learning and supported learning within the blended learning approach was appropriate for postgraduate students. Although embedding the ethical content within a structure based on lecture/tutorials for electives allowed for tutor support, few students felt the need for further support. The findings of this study have indicated mechanisms whereby tutors may embed ethics within individual modules by supplementing learning with an on line resource.

References

Brennan, J. and Williams, R. (2004) Collecting and using student feedback, a guide to good practice. Learning and Teaching Support Network.

Cann, A., Calvert J. E., Masse K. L. and Moffat K. G. (2006) Assessed on line discussion groups in Biology Education. Bioscience Education E- Journal, volume 8 available at <http://www.bioscience.heacademy.ac.uk/journal/vol8/beej-8-4.htm> (accessed 1 March 2007)

Krueger, R. A. (1988) Focus groups: a practical guide for applied research. Newbury Park, CA. Sage.

Overfield, J. A. (2005) Bioethics: a self managed module within a taught biomedical specialism. Oral presentation, SIG for Ethics, HEA Centre for Bioscience.

Quality Assurance Agency, HEFCE, 2002, Biosciences, Section 3.1