Quality Issues in E-Learning: Differences in Eastern and Western Approaches

Alan Murphy, Middlesex University London, UK, a.murphy@mdx.ac.uk

ABSTRACT

As traditional education has moved increasingly to new methods of teaching through the developments and expansion of Information and Communication Technologies where students can choose how to learn and more importantly for many when and where this learning takes place, much of the assessment is much more ridged and traditional in its nature. Although formative assessment can easily be conducted on-line and be flexible in terms of time and location, many problems arise with formative assessment in an e-learning context and the ability to establish proper quality controls. This study looks at a typical western model (European) of ensuring quality control assessment and compares this with the type of considerations that Eastern (South East and East Asian) academics consider to be appropriate.

INTRODUCTION

As educational practices and the transfer of knowledge has undergone a shift in many parts of the world from tutor centred to student or learner centred paradigm. The development of the Internet as a teaching resource in particular and the use of ICT in general has led many in the more developed counties to develop media rich teaching tools that offer the learner the ability to work within their own learning styles, work when, and where they want to. Within a traditional environment it has been relatively easy to monitor the learner's assessment; exams are often an integral part of the programme and are taken in a traditional proctored session, while course work progress is often monitored in tutorials and seminars. Feedback which for many students is a vital component of any assessment process is, often quite well developed in an e-learning environment. When these functions move to a distance learning environment, quality controls become more difficult to establish. Typically programmes are designed in the 'west' (Europe and North America) and often delivered in the East., as education becomes global in nature, (Bates, T. 2000).

THE WESTERN MODEL

This description is based upon the model established at Middlesex University for its Global Campus (GC) e-learning project where students are taught using e-learning at the UK based campus and also at centres such as those in Egypt, Dubai, Maldives, Singapore, Hong Kong, China and Vietnam. In countries such as Hong Kong and China these may be in multiple centres. The programmes are mostly Computing science under and postgraduate, but also business programmes have started to be developed. Over 1000 students have taken the programmes overseas.

The Global Campus Project

In the Global Campus (GC) project, Web technologies are widely used to offer an e-learning mode for postgraduate and undergraduate degree programmes. The key objectives are to exploit the advantages brought by the development of flexible learning arrangements for locally based students as well as to efficiently deliver high-quality courses to partner institutions and students abroad. For that purpose, Learning Support Centres (LSCs) locally support distance students in weekly-held tutori-

als. First, a module reader is prepared which is similar to a textbook consisting mainly of the notes and the learning material arranged according to a five-stage pedagogical model called SCATE (Scope, Content, Activity, Think and Extra). This is accompanied by a module CD and a WebCT version for distance students to use. The module is then delivered to students in both Middlesex University London, the home institution, and the LSC. Feedback is recorded throughout the trimester. The pedagogic model SCATE is itself western in orientation and is similar to many other used in Europe and North America. (Woodman et al 2001)

Students are also actively encouraged to complete online assessments and quizzes. These include multiple-choice as well as free text assignments. As such, GC secures a greater degree of pedagogical flexibility and offers alternative ways to assess work.

METHODOLOGY

As part of the European Union funded project four universities received a grant from the European Commission to engage in a project titled Asian Distance Education – e-learning Professional Training (ADEPT). The goal of the project is to foster excellence in e-learning in higher education institutions in Southeast Asian nations. ADEPT hopes to accomplish this by providing for the exchange of e-learning expertise by focusing on the skills of tutors. The four universities involved with the ADEPT project are Middlesex University in the UK, University of Twente in the Netherlands, Singapore Polytechnic in Singapore and Kasetsart University in Thailand. Under the Adapt project a series of workshops to train e tutors were set up. The e tutors used the GC system as a model in which after training they simulated their role as tutors. All the participants were experienced in using ICT in their roles as tutors.

Participants

100 e-tutors form East and South East Asia took part in training sessions over a period of around 6 months 2005-6 using the GC system - interviews and questionnaires where used after the training took place.

Interviews and data collection

Semi-structured interviews were conducted with the tutors as well as a questionnaire using the 1-5 Lockhart scale.

Data

Qualitative data collected and analysed in this paper cover the following aspects quality:

- Quality in terms of course work
- Quality in terms of exams

Methodology

As part of this work an initial survey was conducted into the role of sumative assessment in amongst the e tutors attending the work shop

in which GC was the model used. Data shows a considerable difference emerging between western and eastern assessment methodology. In particular there seems to be a considerable difference in the amount of emphasis put on the quality process between the regions.

Western Style Model (GC)
To enable GC to meet the strict criteria imposed upon it by the Quality Assurance Agency (QAA) and to meet its own quality standards, for assessment it was necessary to have equality of assessment standards between home based students and those learning overseas. It was therefore necessary to make sure that all sumative assessment was monitored in the same way. As such all exams had to be proctored, all students took the same papers, and had to overlap in all locations such that no transfer of exam information could take place between locations. In the western model much emphasis is placed upon creativity especially in course work (Craft, A. 2001) and making sure the work is the students 'own' is given a very high priority. As such on GC course work had to have at least some oversight to make sure as far as possible that it was the authors own. The only practical way to achieve this was to work with what where called Learning Support Centres (LSC).

Originally LSC were to be any reputable learning or training establishment, however, in practise it was decided to link up with highly regarded higher educational institutions. The QA constraints therefore reduced considerable the flexibility of the learning process. The learners were required to attend tutorials, and exams at the LSC so their work could be monitored. Course work therefore, was monitored as far as possible in the same was as it was on the home campus in London UK. As a further check course work was moderated at the home campus. In both undergraduate and postgraduate programmes a substantial project was undertaken by the students which had both a local and UK based supervisor, who both saw the work in progress and communicated with one another providing another check. The students were also subject to a possible viva voce in the case where the work was suspect but also a set number of students where also selected at random in an effort to deter potential problems. Initially they where carried out with UK staff visiting the LSC but later where carried out via a video link (originally ISDN then via the web).

All exams where proctored and as they are taken in different time zones it was decided that all exams would overlap in terms so that the final exam in the UK would start before the first exam had finished in Hong Kong. In this way no student would be able to send or receive information about the exam papers being sat- students where not allowed to enter late or leave early.

This system has been scrutinised by the UK Quality Assurance Agency and found to be robust. However, although it does provide a high level of security it is also limiting and expensive to operate. It is, for example, impossible to operate any further west than Europe for the exams to over lap (given that they start in the East Asia), without having multiple exam papers and running into the question of comparability. Furthermore if the programme was to operate as a true Distance Learning programme with only electronic contact it would be difficult to have an oversight of course work without using a video link (often unavailable to individuals in many countries in East Asia).

Eastern model
Many educational establishments in countries in South East and East Asia now run their own e learning programmes. The data gathered shows some interesting differences between 'Eastern and Western models' In

general nearly all of the people interviewed worked in higher education (HE) and had experience of teaching on e learning programmes (120) with a few from the commercial sector mostly in large organisations that ran e learning course for training. The information here is from the HE attendees.

Most programmes offered had a significant amount of marks available to students for course work usually between 30-50% of any module. 78% said that they did not feel it was necessary to monitor the students work to see if was their own and they simple received the work via email. On the issue of plagiarism, the majority 63% felt that it was acceptable for students to use unattributed sections from other peoples work in their own course work – this was discussed at some length with a number of attendees and the general opinion was that it was obvious to them when this had been done and so the students were not trying to gain any advantage from it.

In terms of exams nearly all attendees used some form of on line multiple choice exams, often from a random 'bank' of questions. When the efficacy of multiple choice was discussed the vast majority considered that it was difficult to set questions that where equivalent to those set in a normal exam. In the majority of cases students had to attend exam centres – ie they could not take them in private at home and unsupervised. However, it was felt by nearly every one that the flexibility of on-line exams out weighed the disadvantages.

DISCUSSION
Clearly for most western HE organisations this approach to course work would not be except able. Given that many would wish to have a robust assessment system as well as the flexibility offered by e learning is there another way to conduct on line assessments that can go some way to addressing these issue?

One way foreword would be to use on line video. As the technology improves and as long as students have it available and it's robust enough for delivery, there is no reason

why for example, that an individual could not be monitored while they take their exams – the logistics of large numbers taking the exam at the same time may produce problems. It would be possible to both watch over and listen into any one taking an exam. In terms of course work, again the use of video with appropriate software would allow lecturers to both discuss with students and see their work in real time without the chance of intervention by a third party.

REFERENCES
Bates, T. 2001. *National strategies for e-learning in post-secondary education and training*, International Institute for Educational Planning , Unesco.
Craft, A. 2001. *An analysis of research and literature on creativity in education*. Report prepared for the qualification and curriculum authority.
Elliot, M. 2002. Blended learning: The magic is in the mix. In A. Rossett (ed.), *The ASTD E-Learning Handbook* , 58-63. New York: McGraw-Hill.
Shiraev, E. & Levy, D. 2004. *Cross-cultural psychology: Critical thinking and contemporary applications*. Boston: Pearson.

ACKNOWLEDGEMENTS

Related Content

Blurring the Boundaries: Ethical Considerations for Online Research Using Synchronous CMC Forums
Danielle Lawson (2004). *Readings in Virtual Research Ethics: Issues and Controversies (pp. 80-100).*
www.irma-international.org/chapter/blurring-boundaries-ethical-considerations-online/28294

Integrated Digital Health Systems Design: A Service-Oriented Soft Systems Methodology
Wullianallur Raghupathiand Amjad Umar (2009). *International Journal of Information Technologies and Systems Approach (pp. 15-33).*
www.irma-international.org/article/integrated-digital-health-systems-design/4024

Good Practices in E-Government Accessibility: Lessons From the European Union
Fernando Almeidaand José Augusto Monteiro (2021). *Encyclopedia of Information Science and Technology, Fifth Edition (pp. 1513-1525).*
www.irma-international.org/chapter/good-practices-in-e-government-accessibility/260285

The Influence of the Application of Agile Practices in Software Quality Based on ISO/IEC 25010 Standard
Gloria Arcos-Medinaand David Mauricio (2020). *International Journal of Information Technologies and Systems Approach (pp. 27-53).*
www.irma-international.org/article/the-influence-of-the-application-of-agile-practices-in-software-quality-based-on-isoiec-25010-standard/252827

Cuckoo Search Algorithm for Solving Real Industrial Multi-Objective Scheduling Problems
Mariappan Kadarkarainadar Marichelvamand Mariappan Geetha (2018). *Encyclopedia of Information Science and Technology, Fourth Edition (pp. 4369-4381).*
www.irma-international.org/chapter/cuckoo-search-algorithm-for-solving-real-industrial-multi-objective-scheduling-problems/184144