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How do you like it? Student Perspectives On Remote E-Learning

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ABSTRACT

Edith Cowan University (ECU) is embracing e-learning as its preferred mode of distance education. E-learning has changed the mode, pedagogy and style of learning for distance education students. The convenience of studying online has provided numerous opportunities for remote learners but what is the reality of their educational experience via e-learning? This paper reports on a small-scale research project that examined e-learning from the student's perspective. The views of ECU distance education students in Singapore, Thailand, and remote parts of Australia were analysed in order to learn how to better support their needs.

INTRODUCTION

ECU is based in Perth, the capital city of Western Australia, perhaps the most isolated capital city in the world. The University has a long tradition of serving distance education students. Traditionally, paper-based unit materials had been produced for these students. But in the past five years, the impact of globalisation upon higher education in Australia has led to exponential growth in this market. This change in perspective from a local to global market has gone hand in hand with the adoption of online computer-based teaching tools. And the clientele is now not only from the remote parts of Australia, but also from other parts of the world.

New technologies are enabling students around the world to study online using the same materials. One can sit at home in Bangkok or London and study online for a US Degree, or sit in Chiang Mai or Darwin, and study online for a Master of Education from Perth. The outline mode of instruction has become more integrated between on-campus and distance education students. In previous times on-campus and distance education units were separate, often taught by different people and certainly with different materials and assessments. Now the lecturer/tutor typically has many types of students within their unit. These include Australian and local based international students studying on campus in class and/or online, international students studying overseas, and students from other parts of Australia.

Whereas most research in this field has investigated e-learning from the perspective of the content provider and has focused upon economics and delivery, Pan (2005) reported upon e-learning from the pedagogical perspective and found that, "purely virtual classrooms and click-and-drag curricula have not delivered their promise" and "e-learning creates different values for different learners and purposes". These findings were also supported by Pagram and Pagram (2006), who found that in Thailand e-learning materials did not support cultural values or social learning styles. Like these projects, the current research looked at e-learning from the point of view of the student rather than that of the provider. The current research builds upon this and focuses upon the (perceived) educational value and support of online learning rather than economics or delivery.

This research is part of a longitudinal study, which was commenced in 1999, and builds upon the researchers' previous investigation of e-learning from the clients' perspective (Pagram & Rabbitt, 2004). That study examined the ability of off-campus students located in northern Western Australia to access the internet for online study. It revealed that the ability of students to study online in remote locations was restricted compared with their city counterparts, due to limited online access rather than a deficiency of skills. The lack of reliable ICT infrastructure raised concerns, as universities (ECU included) were moving towards the electronic distribution of learning materials, and shifting away from the paper-based traditional distance education.

The current research examined issues of pedagogy and e-learning with a view to better supporting the needs of our distance education students. Specifically, the focus was on the learning styles and views of external online distance education students. A diverse sample of off-campus online students from Western Australia, Queensland, Singapore and Thailand were surveyed and interviewed. The research was conducted with individual students and small focus groups. This included students undertaking unit-based study, thesis work and those being supervised remotely. The research focus evolved both from the literature and the author's previous research; in particular we were interested in how the culture and learning style of the learner affected their interpretation of online materials and whether we at ECU were delivering what our students needed or wanted.

Some students in this study were undertaking unit-based course work online, and others, including Thai students, doing Doctoral studies online, who rarely met their doctoral supervisor, if at all. Unlike many US style PhDs, Australian PhDs are usually thesis based. Thus, for non-locally based students, this supervision for an 80,000 to 100,000-word piece of research is done mostly via electronic means such as email.

Online distance learning (Learning Management System Based)

Over the past five years the development of web based LMS has enabled ECU (and many other universities) to deliver its distance education units online at a reduced cost of printing and distribution of learning materials (but is this cost cutting the main concern of the service providers the universities?)

Initially the online courses at ECU were little more than the traditional printed materials placed online. But more recently many have become more sophisticated, incorporating the pedagogy to reflect the online mode of learning. Unit materials are made available to students through a learning management system (Blackboard is the system commonly used at ECU but others are or have been utilized). This development has also taken place at a time when ECU has needed (through reduced government funding) to expand and recruit students globally. Thus, as stated above, these online materials were then being used by students of diverse cultural and linguistic backgrounds.

In reality the online units have had some problems in meeting this global need. As Pagram and Pagram (2006) found, problems have arisen from equality of access, both from technology and an English literacy perspective, and also because of a seemingly unavoidable cultural bias in terms of learning style, and pedagogy, disadvantaging those from outside the mainstream culture.

In many cases the unit materials examined were 'hybrid units', with online e-learning materials primarily designed and intended to support students who were attending class as an additional learning resource. These materials were then offered to those students who were unable to attend campus-based classes. Thus students undertaking hybrid units externally were getting hand-me-downs and often lacked some of the learning experiences provided to the campus-based student.

Remote supervision

Traditionally students undertaking thesis-based courses, such as PhD, Masters by Thesis and Doctor of Education Portfolios, undertake ongoing and detailed discussions with their university supervisor, either on a regular basis or as needed by the student and supervisor (Holbrook & Johnston, 1999). In the globalised education market ECU supervisors often find that their students

are six to ten hours time flying away, making regular physical contact impractical. These students are supervised largely by email and the occasional telephone conversation.

METHODOLOGY

In order to determine what issues surrounding e-learning were important to the students, an interview technique was chosen. The 29 participants involved with this research were chosen because they were studying online (or being remotely supervised), were at both under and post graduate level and located in diverse locations: metropolitan, remote, regional and international. The interviews were conducted in English, recorded to be transcribed later.

Research Questions

- What are students' views of the Learning Management System (LMS) used by ECU?
- What ICT skills do students studying online possess?
- Are online technologies practical tools for students studying in isolated areas?
- What ICT facilities do students have/need and where do they access them?
- What pedagogies are being used in education units?
- Is there a cultural bias in the course design according to students studying online?

SUMMARY OF FINDINGS

Some of the students interviewed felt apprehensive about e-learning despite the widespread acceptance of this learning style. For example, some spoke of their uneasiness of studying in isolation away from regular contact with their lecturer and peers. All those interviewed commented on how e-learning was markedly different to their previous educational experience. At high school, students were carefully monitored and their work was directed, whereas the e-learner had to be confident and pro active. In most cases, the students reported that there was little follow up or inquiries from the lecturer regarding their progress.

From the outset, some students spoke of difficulties they experienced with gaining guidance, even when it came to the selection of units. In some instances, students were not even aware that they were enrolling in online units. Some did not possess the prerequisite IT skills or have access to the required infrastructure to study in this mode. The cognitive level of accessing the technology was for some students greater than the assimilation of the knowledge. The how was harder than the what!

Interpreting the unit materials was a major concern for the majority of e-learners. For the international students, particularly those who's English was a second language, evidence of misinterpretation of the task at hand was high. Students spoke of carefully framing questions on email and then having difficulty understanding the answer (Knowles, 1999), whereas their counterparts in the on-campus lecture theatres had the added advantage of interaction with their lecturer and peers, and the opportunity to engage in discussion and have questions answered immediately. On-campus students were also given visual clues by their lecturers' body language, and listening to others' opinions was a means of stimulating broader viewpoints. For the e-learner, email was the life support.

Findings for the research questions:

What are students' views of the LMS used by ECU?

Most students preferred the idea of studying online and were able to navigate and use the LMS successfully. One student described using the LMS as being better than a paper-based distance education unit "as you feel that you are part of a group but it is not as good as attending a class" (Personal Communication, Sum, 23rd March, 2005). Many had problems relating to security and enrolment. They were unable to access the materials due to password and enrolment difficulties, resulting in 'no access'. Lack of ICT skills, poor access to the internet, and/or limited bandwidth further compounded some students' access to online learning.

What ICT skills do students studying online possess?

Some students enrolled in units without realising that they were online and had no ICT skills to apply to their studies. Others reported having trouble accessing online units due to basic log-in and password problems. "I enrolled in an external unit and did not realise it was an online unit. I had to withdraw and do a computer course instead as I didn't have the skills to study online. I was really disappointed" (Personal Communication, Ann, 4th April, 2005).

The students interviewed claimed that ICT proficiency, or rather the lack of it, was an ongoing barrier to their study. Requiring a special piece of software, such as a PDF viewer, or a plug-in for playing a video clip, caused stress. This added a cognitive load for students studying online courses.

Are online technologies practical tools for students studying in isolated areas?

Equality of access is a factor rarely taken into account when designing online learning materials, but in reality only those in large cities have the opportunity to have broadband at home. Most can only gain dialup access, and have to rely on work or internet cafes for fast access. In really isolated areas even these facilities are not available (Pagram & Rabbitt, 2000).

ECU has a significant number of distance education students in WA and Queensland. Some students do not have access to broadband and must use a dial up connection that is not reliable (Pagram & Rabbitt, 2004). Trials by one of the researchers in the North of Thailand revealed a similar problem. In that part of Thailand broadband was only available in internet cafes but the machines were old and did not have acrobat or any special plug-ins etc. Some machines tested did not even have Word. Dial up was available but even while using the Thai Loxinfo, (the equivalent to BigPond in Australia) dropouts were common. For 2 days out of 5 days trialed, the fastest connection was 28K.

What ICT facilities do students have/need and where do they access them?

Most students reported studying at home in the evening and after work. All had access to a computer and the internet, either at home or work, but as indicated above the quality and speed of this access varied. Only a minority had to rely on going to an internet café.

What pedagogies are being used in education units?

The researchers examined some of the course materials and found that, whereas educators talked of constructivism the underlying pedagogy for many ECU units was instructivist in nature. The learners need to decipher what was required was partly caused by the limitations of the LMS. The LMS has an underlying methodology more suited to training than education. Furthermore, some units were not designed for e-learning. They were just paper-based materials cut and pasted into a web page. Some Australian online students pointed out that on-campus students were provided with more resources and in some cases got different information & assignments.

Is cultural bias in course design exacerbated when students study online?

Some cultural bias is unavoidable in online instructional design. Within a classroom a "good" teacher adapts to the varying learning styles and needs of their students. But with online learning it really is a case of 'one size having to fit all' as the learning is not personalised.

Thai students, in particular, found the use of discussion boards to critique expert literature very confronting. Many students admitted their English language skills were a limitation in understanding the materials to be studied (Sun-Keung Pang, 1999). However, one student said that in a traditional class if she did not understand she was too embarrassed to ask for help, but with online materials she could spend as much time as she needed until she understood.

The survey revealed that students from some cultures did not like working alone online; they felt the need to be part of a learning group (Craven, 1999). Discussion boards did not seem to help. Some Australian students noted that they were disappointed with how little the discussion board was used by their peers. They realised the potential of the board to broaden their learning experience but felt it was not being realised. On the other hand, students with Languages Other

Than English (LOTE), were reluctant to post their ideas online, due to their lower levels of literacy. Some had no constructivist learning background and found the online activities challenging. For Thai students, for instance, to publicly argue a case was seen as unforgivable behaviour and culturally inappropriate.

Findings specific to remote supervision

All of the students supervised remotely were very appreciative of their supervisors' efforts, particularly the fast turn-around of drafts and email replies. However, the sophisticated nature of Doctoral level study, and academic research and writing at this level, magnified the students' feelings of isolation. One student described how analysing her research data using SPSS became a trauma, which would have been avoidable if she could only have met with her supervisor. For this reason many part-time PhD students spend their annual holidays in Perth as on-campus students.

CONCLUSIONS

Analysis of the data shows trends that are regional or cultural. Some of these relate to access, others to design, and others to learning style. Australia has become a multicultural society that has great variations of ICT and online access. Accommodating this diverse range of learners is imperative for universities such as ECU that are marketing their courses to the world.

Universities' move to online learning has enabled them to gain access to markets far beyond their traditional catchment areas. This has given students a new way of learning that is very flexible, but it has meant the loss of a human teacher who can adapt to students' needs. The designers of e-learning systems need to realise that the 'one size fits all' nature of the current generation of LMS driven e-learning systems is inadequate pedagogy. These systems are designed as technology focused solutions rather than human-focused. What is needed is human-focused, technology-supported systems. These are possible but they require a team of talented people to maximise learner control and adapt to the learners' individual needs. It is what is known as an interactive expert system. Needless to say this is an expensive solution, and educational administrators have been led to believe that online learning is going to solve all their financial problems, not cause them.

It is hoped that by understanding the pedagogical limitations of the current systems used, good course designers can make the best use of the limited resources available, without alienating students or shutting them out by the use of resources too media rich to be viewed in remote areas. Course designers must start by learning about the students for whom the materials are intended. These days universities frequently refer to students as clients. But the notion that students come first has been overridden by the quest for viable online design. The reality is that content comes first and individual student needs last.

As well as employing a graphic designer and content expert, the online instructional designer needs to consult cultural experts from the countries and regions in which the material is to be marketed. Fortunately universities such as ECU have such 'experts' (international, indigenous and country students) who can advise the other 'experts', the designers, on differing learning styles, cultural taboos, and the difficulties of local internet access. The materials can then be designed around the learners' needs, rather than around the needs and limitations of the technology.

For students who are being remotely supervised, the problem is essentially one of communication. Words via email are a poor replacement for a face-to-face meeting when complicated theories and methodologies are to be discussed. Email conversations are fraught with difficulties, compounded when the writer and recipient are from different cultures and have different native languages.

All students need to be motivated and organised to successfully attain their goals. This is fundamental to the success of the online distance education student who must be self motivated to stay on task. These learners often navigate their way through uncharted territory facing problems which the course providers could not imagine and thus need more consideration and support.

The results indicate the following points that need to be taken into account when using online material and supervision remotely:

- E-learning cannot replace the classroom and teacher or face to face meetings with a supervisor so provide learner support for both technology and learning additional support is needed for these students.
- Use tools such as chat and discussion groups to provide online learners with a sense of community and to allow discussion with a supervisor.
- Be alert to the barriers of the English language and culture.
- Be alert to the barriers of bandwidth and access.

Clearly more research is needed and the authors are proceeding with a larger survey of how students use online resources and investigation online tools, which may help support student needs.

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