



A Global Culture for E-Learning

Alan Murphy, School of Computing Science/Centre for Learning Development, Middlesex University, London, UK, a.murphy@mdx.ac.uk

ABSTRACT

e-Learning provides a relatively new method for teaching in higher education in general and in East and South East Asia in particular. Many e-learning programmes are developed using a western based pedagogy for use in the east.

However, the evaluation of these programmes is in its infancy. The current study was co-funded by the EU and adds to the body of research providing guidance for e-educators. The qualitative data collected from e learning tutors from South East and East Asia indicates that there are differences based on cultural context in the following areas of communication; within student peer groups; tutor to student, as well as variations in the willingness to discuss problems. The study provides recommendations to enhance the distance education programmes. The conclusion points to issues that should be addressed at the design and managerial levels.

INTRODUCTION

E-education research in the west (North America and Europe), has demonstrated that many learners require support and guidance to perform effectively (Threlkeld & Brzoska, 1994). This support is typically provided in two forms; either as a student to teacher channel of communication and/or as a student to student interaction.

It has been proposed that using a set methodology may be useful in enhancing the quality of the learning process. Learners value timely feedback regarding course assignments, exams and projects (Egan, et al., 1991). Students have also been found to benefit when they operated in small learning groups. These groups provide support and encouragement along with extra feedback on course assignments. Most importantly, the groups could foster a community feeling that would support the learners. Structured contact with the teacher has also been identified as a useful tool (Coldeway, et al., 1980).

Additionally, an on-site facilitator could develop a personal rapport with students and increase student satisfaction with courses (Burge & Howard, 1990).

Increased academic expectations from the use of e-technologies as a means of web-based education delivery has also brought to the fore a number of issues concerning quality and effectiveness of online learning. Research undertaken in educational settings similar to the ones examined in the current study, for example at the Open University of Hong Kong, found that the effect of online learning can vary across individual courses, and is largely affected by the way in which technology is integrated into a course (Shin & Chan, 2004).

The Global Campus Project

In the Global Campus (GC) project, Web technologies are 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 (London UK) 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 tutorials. First, a module reader is prepared which is similar to a text book 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 students to use. The module is then delivered to students in both Middlesex University London, the home institution, and the LSC's. 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)

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 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: this study is on going.

Participants

At the time -of this study some 82 e-tutors from East and South East Asia had taken part in training sessions using the system and 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. The data was gathered over a period of nearly 2 years in different countries and at different workshops and meetings. Small differences existed between groups and at different times however the statistics here are for the group as a whole.

Data

Qualitative data collected and analysed in this paper cover the following aspects of the learning environment:

- Communication between students
- Cultural aspects
- Quality aspects for assessment
- Recommendation and solutions in developing e-learning for multi cultural use

FINDINGS

Communication Style amongst students

Most tutors (84%) said that students would communicate with each other to ask more detailed questions on assignments and to ask questions that they would not wish to ask the tutor directly (90%). Chat rooms were considered by nearly all (93%) to be an essential element of any e-learning system, however, many felt that there could be potential problems if there was no moderation, (a number of Chinese tutors stated that this could be a potential political problem). The GC system did not normally include moderation.

Quality Aspects of Assessment

There was a significant difference between cultures in terms of the emphasis on quality assurance for assessment. Tutors did not feel for example that it was important to check for or penalise plagiarism. In terms of course work again few checks seem to be made on who had undertaken the work.

DISCUSSION

The use of Information and Communication Technologies (ICT) and the increase in Web usage for delivering and managing e-learning programs is leading to the development of programmes being delivered internationally. The findings of this study provide some evidence that key aspects of technology support relate to computer communication (e.g., web-enabled communication between learners and instructors or peers) and cultural aspects of tutors are a potential problem.

Cultural Differences

A number of commentators consider that culture is such an integral part of our life that unless we are correctly trained to be aware we tend to overlook its existence (Helmer and Eddy 2003). Some observers consider that because of cultural directly influences they way students think, respond to questions and even approach problem solving (Solano-Flores et al 2000). Within the GC project some attempt was made to understand these differences and to translate these into design functions. Some authorities have divided learners into high and low context (Hall 1966, 1976). The High context Learners (HCL's), circular approach to thinking is generally associated with the group culture often found in South East and East Asia, but also in South America. The low context culture is represented by Northern America and Europe. Typically high context cultures are characterised as follows:

Implicit messages
Internalized messages
Nonverbal coding
Reserved reactions
Distinct in-groups and out-groups and out-groups
Strong people bonds
High commitment
Based on Hall 1976

Social cognition theory (Henning 2004) postulates that HCL's require more social context in order to understand communication and respond accordingly. They therefore struggle with western-based e-learning environments especially at the start of the programme. This seems to be confirmed by the response indicated in this survey.

HCL's have problems in perceiving meaning within an ICT environment without some human-to-human link, requiring non-verbal clues that for the most part, do not exist in a web environment. In GC one way around this problem was to have a local tutor, however in a strictly on-line environment it becomes more difficult. However, it may be possible to increase the contextual background in e-learning material, or if using video a facilitator may be of use. In general it may be useful to provide extra background information that one would not normally include for western students. For discussion boards it may be necessary to supply more information on those involved as well as have moderator to act as both a gatekeeper but also to make certain every one gets involved. It is important for western developers to be aware of the differing political sensitivities that operate outside of the west.

Enabling E-education Through Advanced Learning Technologies and Cultural Awareness

After hundreds of years of very slow change and an almost handmade

approach to education, many education institutions are now using e-learning systems that are technologically dynamic, with pedagogic models that are often adapted from a more traditional era, and with unclear user requirements - especially when the system has to operating in a trans-national context where diverse cultures are at work. Even within a single campus environment it is now common to have a culturally diverse student and faculty body. E-education operations have evolved quickly and now have the capability to fully utilise the web in terms of its multimedia capability, and some are now moving onto mobile devices. According to Taylor (2001), what is developing is an Intelligent Flexible Learning Model, which attempts to enable web-based education through:

- Online interactive multimedia
- Internet-based access to web resources
- Computer mediated communication using automated response systems
- Campus portal access to institutional processes and resources

The GC project has employed most of these technologies by providing virtual learning environments for all modules taught in courses. GC has refined its operation and material based on feedback and research (Murphy 2001). However, GC clearly has more to do when it comes to operating in a multi-cultural environment. In e-learning systems the pervasive philosophy is 'one size fits all' which is not surprising given both the high cost and long lead time, involved in developing high quality e-learning programmes.

RECOMMENDATIONS

Clearly if a western pedagogy is being used it needs to either be adapted for use in South East or East Asia (or for that matter in other none western, low context, countries). An alternative solution is to establish a training programme that would both train the tutors and students in using the model and to see the advantages of using the western based pedagogy. As to mobile communications, it will clearly be important to make sure that any system fits into the design consideration for the usability functionality of mobile devices especially in terms of threaded discussions. Clearly just as there is no one size fits all solution to e-learning design there is no simple solution to training designers to solve the problem but there is a demonstrable need to give due consideration to the issues associated with high context learners and those whose English is a second language. Also for many western academics the issues of quality assurance in assessment seems to be of more importance than for their eastern counterparts.

CONCLUSION

This study has provided a series of findings with respect to cultural differences, especially in communication patterns. This study provides recognition for an area that is much neglected in e-learning research and may help others when it comes to designing new or adapting existing e-learning systems. Future research should be conducted to determine whether these issues in terms of their learning outcomes significantly affect students.

ACKNOWLEDGMENTS

I would like to thank all those people in the Adept and GC who helped in this project. This project is funded by the European Commission under the ASEAN-EU University Network Programme (AUNP).

REFERENCES

- Burge, E.J., & Howard, J.L. (1990). Audio-conferencing in graduate education: A Case Study. *The American Journal of Distance Education*, 4(2), 3-13.
- Coldeway, D.O., MacRury, K., & Spencer, R. (1980). *Distance education from the learner's perspective: The results of individual*

- learner tracking at Athabasca University*. Edmonton, Alberta: Athabasca University.
- Egan, M.W., Sebastian, J., & Welch, M. (1991, March). Effective television teaching: Perceptions of those who count most...distance learners. *Proceedings of the Rural Education Symposium*, Nashville, TN.
- Holmberg, B. (1995). The evolution of the character and practice of distance education. *Open Learning*, 10(2), 47-53.
- Hall, E.T (1966) *The Hidden Dimension*. Garden City NY:Doubleday
- Hall, E.T (1976) *Beyond Culture*. Garden City NY:Doubleday
- Helmer, S. and Eddy, C. (2003) *Look at me when I talk to you: ESL in non-esl classrooms*. Toronto Canada: Pippin Publishing Corp., (pp20-35).
- Henning, P.H. (2004) Everyday cognition and Situated Learning. In D. Jonassen (Ed) *Handbook of research on Education Communication and Technology* (pp143-168) . Mahwah, NJ. Lawrence Erlbaum Assoc.
- Martin, E.E., & Rainey, L. (1993). Student achievement and attitude in a satellite-delivered high school science course. *The American Journal of Distance Education*, 7(1), 54-61.
- Murphy, A., Bakry, W., Milankovic-Atkinson, M., Sadler, C. & Woodman, M. *Choosing Pedagogy and Technology for an International Web-based Masters Degree*, Computers and Advanced Technology in Education (CATE 2001), Banff, Canada, June 2001
- Woodman, M., Murphy, A., Atkinson, M. & Sadler, C. (2001). *From Conventional to Distance Education: Adopting a Pedagogy and Managing the Transformation*, In J. Stephenson (Ed), *Teaching and Learning Online: Pedagogies for adopting new technologies*, London, Kogan Page Limited, 2001
- Shin, N. & Chan, K.Y. (2004). Direct and indirect online learning on distance education. *British Journal of Educational Technology*, 35 (3), 275-288.
- Taylor, J.C. (1995). Distance education technologies: The fourth generation. *Australian Journal of Educational Technology*, 11(2), 1-7.
- Threlkeld, R., & Brzoska, K. (1994). Research in distance education. In B. Willis (Ed.), *Distance Education: Strategies and Tools*. Englewood Cliffs, NJ: Educational Technology Publications, Inc.

0 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/proceeding-paper/global-culture-learning/32944

Related Content

Artificial Neural Networks

Steven Walczak (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 120-131).

www.irma-international.org/chapter/artificial-neural-networks/183727

Nominalizations in Requirements Engineering Natural Language Models

Claudia S. Litvak, Graciela Dora Susana Hadadand Jorge Horacio Doorn (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 5127-5135).

www.irma-international.org/chapter/nominalizations-in-requirements-engineering-natural-language-models/184216

The Intersection of Religion and Mobile Technology

Wendi R. Bellar, Kyong James Choand Heidi A. Campbell (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 6161-6170).

www.irma-international.org/chapter/the-intersection-of-religion-and-mobile-technology/184314

Power System Fault Diagnosis and Prediction System Based on Graph Neural Network

Jiao Hao, Zongbao Zhangand Yihan Ping (2024). *International Journal of Information Technologies and Systems Approach* (pp. 1-14).

www.irma-international.org/article/power-system-fault-diagnosis-and-prediction-system-based-on-graph-neural-network/336475

PolyGlott Persistence for Microservices-Based Applications

Harshul Singhal, Arpit Saxena, Nitesh Mittal, Chetna Dabasand Parmeet Kaur (2021). *International Journal of Information Technologies and Systems Approach* (pp. 17-32).

www.irma-international.org/article/polyglot-persistence-for-microservices-based-applications/272757