

CAN ONLINE LEARNING WIN OVER CHINESE STUDENTS? – A CASE STUDY OF SWINBURNE UNIVERSITY OF TECHNOLOGY

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ABSTRACT

This paper has emerged from an ongoing research project investigating the policy, behavioural and curricular issues associated with the online educational experience of Chinese university students studying onshore in Australia. Two key perceptions have surfaced. First, that these students are uncomfortable with learning in online mode, despite their familiarity with computers and information technology. Second, that their command of English is a factor, with debate over whether they would feel more comfortable engaging in learning activities in a class-based face-to-face context than in online mode. Arguably, while important, these concerns are symptoms of a broader problem, which may have to do with cultural and behavioural considerations both in Australia and the home country. This paper seeks to identify these underlying causes and propose potential solutions to the problems of online education.

The findings confirm that, although Chinese student enrolments remain stable, there is indeed an undercurrent of discontent with online delivery among onshore Chinese students. There is also evidence that the success rate of students in face-to-face classes is well in excess of that for online classes. However, there is more to this than simply the inappropriateness of online teaching and learning for Chinese students. Our research suggests that a more considered and consultative approach, that takes more care over deeper cultural concerns, and addresses issues around the social as well as the educational environment, is likely to dispel most concerns about online education and how to prepare Chinese students study online. This could also provide potential solutions for Australian educators seeking to improve the educational experience of onshore Chinese students.

Key words: Online Learning, Chinese Students, Online Education, Culture, Language, Study Behaviour

INTRODUCTION

This paper is based upon research into an undergraduate course taught collaboratively by universities in China and Australia. The research was triggered by observations that our Chinese students were much more favourably disposed to learning in face-to-face mode than in online mode. We saw this as significant in today's digital environment and sought to investigate how we might improve our efforts to better prepare students to become effective online learners in a global workplace. It soon became apparent that issues of online versus face-to-face learning, while important, were in fact secondary to the core activity and outcome of learning.

During the three year period 2009 to 2011, 375 students from selected Chinese universities participated in a 2+2 CAP (Collaborative Articulation Program) program at Swinburne's Faculty of Higher Education, Lilydale. The students completed their initial two years study at their home university, then two years in Australia leading to completion of their degree. On completion, the students received degrees from both universities. During the final two years, all students had the opportunity of taking one or two online units. In the event, less than 5 per cent of them

partook of this option. Before looking at the research implications and outcomes of this statistic we first cover some of the background and key terminology.

ONLINE EDUCATION

Online education emerged in Australia in the late 1990s, with university vice-chancellors diverting substantial portions of their budgets towards computer infrastructure and redevelopment of curricula to encompass an online environment (Ryan 1998). Since then there has been a tremendous development in online education (Clarke & Hermens 2001; Abromitis 2002; Wang 2006; Kim & Bonk 2006; Ngai, Poon & Chan 2007; Madden-Hallett & Ho 2008; Scagnoli, Buki & Johnson 2009; Ary & Brune 2011).

Although there has been plenty of research into online education, opinion as to its merits and effectiveness remains divided (Ary & Brune 2011). Writing in a schools context, for example, Gulatee, Combes & Clayden (2011) report that in a school with a 10-year history of online learning, not all students had positive views of online learning, while staff believed that on-campus teaching produced better outcomes. On the other hand, several studies have concluded that online education outcomes are at least, equal to those of on-campus, face-to-face courses (Allen, Bourhis, Burrell & Mabry 2002; Arbaugh 2002).

At this point it is worth asking the question as to whether we are talking about the same things here and comparing like with like. Hence, Gulatee et al.'s (2011) suggest that online learning should be considered as a new paradigm rather than a substitute for the traditional face-to-face classroom experience. It may well be that online learners require a different skillset to engage with and interpret online learning materials. However, this on its own will not guarantee satisfactory online learning outcomes. There are other associated areas such as interaction between instructors and students and developing technologies relevant to online learning and teaching (Ferguson & Ibbetson 2005). Furthermore, Salmon (2005) has consistently argued that technology cannot be successful without appropriate, well-supported and focused human intervention, sound learning design or pedagogical input and the sensitive handling of the process over time by learned online tutors. Indeed, much earlier, Cunningham (1998, pp11) emphasised the importance of the following issues in the development of online education:

- Practical issues, such as questions of cost;
- Pedagogical issues including cultural differences in learning styles;
- Policy issues including accreditation and consumer protection from poor quality providers;
- Philosophical issues such as cultural imperialism, and
- Personal issues dealing with the attitudes of staff and students towards changing methods of delivery.

CHINESE STUDENTS AND ONLINE LEARNING

The bulk of research into online learning has been produced by Western universities working predominantly with Caucasian students. In recent years, there has been a steady growth in Australia of international students, primarily from Asia. Although current visa regulations allow onshore international students in Australia to study up to 25 per cent of their total course units online, they have proved unlikely to do so. Hence, research indicates that students generally choose online units for reasons other than a personal liking for online study, such as repeating a subject, or fast-tracking the completion of a degree course (Gulatee et al. 2011). Our own experience of teaching online courses has consistently been that students from China have not performed particularly well. On the other hand, students born in Australia or from an English-speaking background appear more adapted to this style of learning. There are various reasons for why Chinese students prefer on-campus, face-to-face courses. These include: cultural influences, language ability, learning and study practices, and wider perceptions of online education (Wang 2006; Skinner 2010). We consider these briefly in turn:

- **Cultural influences:** Numerous studies, such as Bond (1986), Yao (1994), Hampden-Turner & Trompenaars (1997), and Nisbett (2003) highlight key cultural differences as a reason for contrasting performance between Western and Eastern students. The basic point being is that as compared to the openness and informality of the West, Chinese cultures value collectivism and hierarchical relationships. Traditionally, according to Pratt (1992), the teacher in China is recognized not only as the deliverer of the content but also as a person responsible for the development of character and someone with whom the student develops a kind of relationship. Yet, the Australian Institute for Social Research (2006) reports that the most negative aspect of online education is often the inconsistent interaction between instructor and students.

- **Language ability:** For anyone studying in another country, a sound command of the local language is important. Not only has this been borne out in our experience with Chinese students studying onshore in Australia, but also for success in online courses an even higher level of proficiency in English is essential. To take one simple example, many students asked about their non-participation in online discussion threads have explained that this has nothing to do with a lack of interest but rather of an inability to write the necessary comments, particularly in real time. Elsewhere, Jun & Park's (2003) research found that Chinese students in an online course seldom initiate a discussion, often lurk in silence, have difficulties participating in online chatting, avoid confronting teachers directly and worry about losing face. Similar findings emerged in our own research.
- **Study behaviour and methods:** Online learning emphasizes individual development, student autonomy and active learning, all of which tend to conflict with the traditional teacher-dominated, passive learning techniques that dominate in Asia (Wang 2006). Again, our own research reinforced indications from the wider literature that in China and Korea, teachers will tell students what to read, what is important, how to find resources, and what examples to follow and students will quite slavishly obey and memorise the content. They are not encouraged to ask questions and lack both the knowledge of how to study independently and the necessary research skills to do so. Chinese students in particular, regularly ask questions such as "which book(s) should I read", "what I should do for my assignment", "do you have examples".... so studying online is challenging for them, as answers can be delayed. There have been many occasions at the Lilydale campus where Chinese students studying online units seek guidance from our staff for matters all and sundry relating to their study. They are often despondent as they consider they are being deprived of a 'real teaching experience. Eom (2006) argues that responsiveness to students' concerns is the area where improvement is most needed if satisfaction levels in online education are to be increased. Likewise, Wang (2006) suggests that in facilitating Chinese students' participation in online courses, teachers should make themselves more accessible and available for online consulting.
- **Wider perceptions of online education:** In the West, much of the impetus behind online education is a combination of the financial and delivery advantages it offers universities, and the convenience and accessibility of online over offline education. In China, however, the situation is quite different, and driven not by financial considerations but largely by government efforts to educate large masses of people (Zhang 2005). Furthermore, Zhang (2005) states that in China, people are more negative toward online education and the credibility of online courses is questioned. Although 67 public universities in China have implemented online courses, research reveals that in general this is not regarded as being real teaching (Huang, Yang & Li 2011; Xu 2011; Yao 2010; Luo & Zhang 2009). In China, there is also a widespread belief that only those students possessing lower academic ability and who cannot qualify for entry into mainstream universities will take the opportunity to study online (Zhu, Gu & Wang 2003; Potter 2003). On a China website, China.org.cn (2006), there is a section devoted to online and adult education, but it advertises itself as being of interest to students who have failed in their university entrance examinations and working adults. As a result, most Chinese regard courses delivered online as second-rate.

Clearly as a result of these and other problems many Chinese students will struggle and indeed, be at risk of marginalization in their new overseas learning environments (Tu 2001; Ku & Lohr 2003). This is hardly surprising when as Wang (2006, pp 79) has concluded, online teaching emphasizes individual development, student autonomy, active learning and mutual communication, all of which conflict with the teacher-dominated, passive, and silent way of learning of Chinese students. One of the apparent outcomes from such cultural and institutional differences, in our own experience, is that these problems are not shared by local students. Nevertheless, despite all that has been written about the difference between western learning and eastern learning, and between online and face-to-face learning, we really need to get to work on how to best use the online teaching and learning approach for all students. Ryan (1998, pp 19) has summed this up when he writes "those of us engaged in developing online materials must ensure that we do not demean the quality of a university education. We must 'use' the tide, like Canute, for a greater good: in this case, to harness the teaching and learning powers of computers to improve the quality of education". In agreeing with this statement we would also add that at the heart of all these sought improvements is the quest for improved and more effective and relevant *learning*. This was substantially the point of our own research as reported in this paper.

METHODOLOGY

For this project, an interpretive methodology was employed using a mix of methods -- qualitative and quantitative -- and employing both primary and secondary data sources. Figure 1 outlines how the research was conducted.

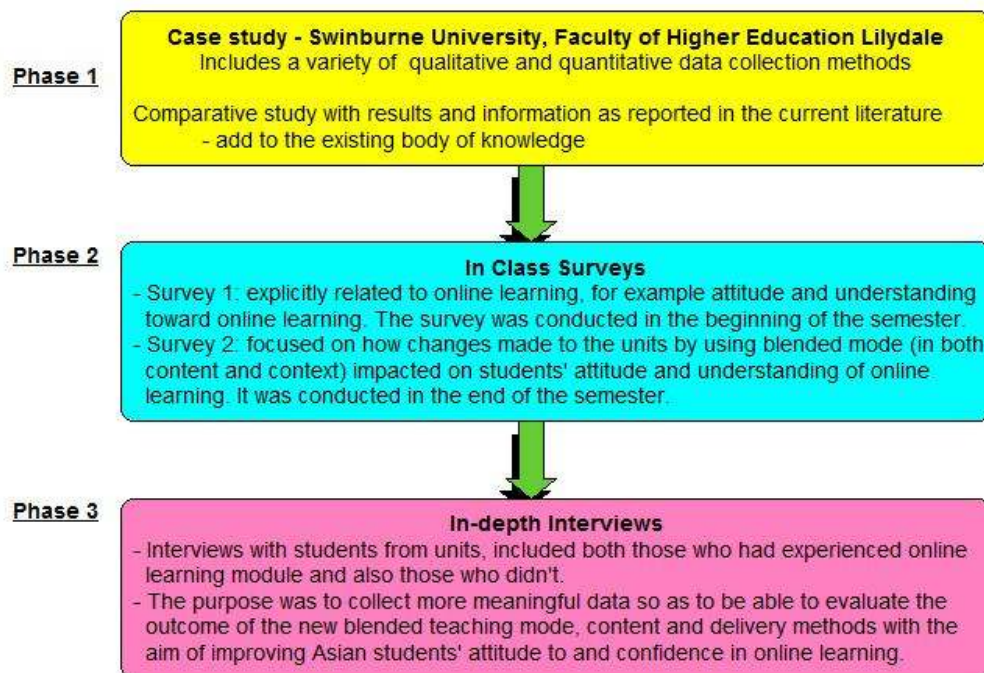


Figure 1: Research Phases

Our research is based upon work with two cohorts of students over the three year period 2009-2012. Our contact with these students in both face-to-face and online mode allowed us to collect additional primary data, and compare these results with those reported in the wider literature, and in adding to the existing body of knowledge. The first of these cohorts was comprised of that 5 per cent of the 2 + 2 CAP course students who availed themselves of the option to study online. They made this choice for one or all of the following reasons:

- 1) visa restrictions limiting their time in Australia due to previous failures
- 2) a desire to graduate earlier, and
- 3) there was no relevant face-to-face unit available.

The second cohort comprised participants from that that majority of students who opted for face-to-face classes. The fact that a small minority, again around 5 per cent, of students in these face-to-face classes was native-born offered an additional comparative element to the exercise.

The second phase involved the conduct of two 'in class' surveys during each semester – at the outset and end of the semester. These surveys sought to obtain two types of feedback. The first related explicitly to online learning, for example their attitude towards and understanding of online learning. The second focused on how changes made to the units by using a blended mode (in both content and context) impacted on students' attitude and understanding of online learning. The purpose was to evaluate if these changes increased the students' active learning skills and improved their capability to study online. Analysis of both surveys required a good deal of reflection and 'reading-between-the-lines' of the student responses.

The final phase involved in-depth semi-structured interviews with those respondents who had indicated on the survey their willingness to participate. A total of 20 students took part in these interviews. The purpose was to collect richer, more meaningful data so as to better evaluate the new blended teaching mode, content and delivery methods and hence further improve Chinese students' attitude to and confidence in learning online.

MAJOR RESEARCH FINDINGS

Our investigation has produced a rich vein of data and with this an increased depth of understanding of the issues around making online learning more acceptable to Chinese students. In this regard, we consider that there are two key points that should be emphasised: cultural factors are critical and what matters is not online learning but learning.

So far as culture is concerned, our findings reinforce those within that wide body of research that acknowledges the importance of cultural factors in international environments be this within multinational organisations or, as in this case, in an international collaborative education program. Hence, our experience suggests that the propensity to engage in open and where necessary, constructively critical communication with peers and academic staff was much greater among Australian-born students than among Chinese students. This applied in both face-to-face and online environments and is an individual and assertive.

As regards the learning factor, cultural influences were again confirmed with in general, the Chinese students finding it much more difficult to break engrained patterns of obedient, rote-type learning and operate as independent learners. Furthermore, although it came as no great surprise that the majority of our Chinese students had little or no experience of online learning, what was unexpected was that in the age of Facebook and Google, and indeed of Chinese versions such as Baidu and Weibo, they lacked even basic research skills in Web searching. However, as the project unfolded it became apparent that what was most important here was not the mode of learning, be this online or face-to-face, but learning, and accordingly the teaching and learning process could be reformed in order to address this issue.

When this research project began in 2009, we adopted a more or less standard approach to teaching and learning on the 2 + 2 course. We prepared and delivered lectures online and conducted tutorials in the normal way, with amendments in the case of online units. Results at the end of Year One in both versions of the unit were mediocre at best and following discussions with colleagues inside and outside the university linked to further reading and enquiry we realised that radical changes had to be made in order to better engage all students. Critically we realised that what mattered was not the *mode* of learning but the *nature* of learning. To this end it was essential that we urgently initiated steps to assist students to become *active* learners.

Over the following two years (2010-2011) we addressed the issue of active learning by continuously monitoring and amending the course content and related learning activities. Essentially, this has resulted in a progression from a 'talk and chalk' environment in which knowledge transfer was largely a one-way street, towards a multi-directional, interactive environment in which there were no formal lectures and much of the learning activity was driven and ultimately determined by the extent of student involvement. There was overwhelming support for the new approach to content delivery with only minor reservations to do with time pressures and language difficulties. Students found the unit interesting and stimulating and mostly enjoyed the opportunities for discussion and presentation of findings in both face-to-face and online environment, including the chance to improve their written and spoken English. The authors were especially pleased to find that students cited the area of critical thinking and active learning skills as two where they had gained through taking the unit. Some of these students selected pure online units this year and did reasonable well.

CONCLUSION

The conduct of this research exercise proved to be valuable in more ways than one. In the first instance, it reinforced our perceptions of the problems presented to Chinese students within an online learning environment. Student responses to the changes we had introduced, along with their suggestions for further improvements more than vindicated our efforts in this regard. Secondly, this turned out to be a learning experience that went beyond the specifics of a particular set of units and into the fundamentals of learning, irrespective of the particular mode involved – face-to-face or online. It emphasised the central importance of issues such as alignment, relevance and meaning in course development and delivery. As indicated above, the major source of evidence to support our claims of improvement in the student teaching and learning experience is qualitative. The research is ongoing and will be informed by the findings from this initial phase of the project.

Author Biography

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REFERENCES

- Abromitis, J. (2002) Trends in Instructional Technology and Distance Education. (ERIC document No. ED 472650). Florida: ERIC Research Clearinghouse.
- Allen, M., Bourhis, J., Burrell, N. and Mabry, E. (2002) Comparing student satisfaction with distance education to traditional classrooms in higher education: A meta-analysis, *American Journal of Distance Education*, 16, 83-97.
- Arbaugh, J.B. (2002) Managing the on-line classroom: A study of technological and behavioural characteristics of web-based MBA courses, *Journal of High Technology Management Research*, 13, 203-223.
- Ary, E.J. and Brune, C.W. (2011) A comparison of student learning outcomes in traditional and online personal finance courses, *MERLOT Journal of Online Learning and Teaching*, 7(4), 465-474.
- Australian Institute for Social Research, (2006) *The Digital Divide - Barriers to e-learning*, The University of Adelaide, Australia.
- Bond, M.H. (ed.) (1986) *The psychology of Chinese people*, Hong Kong, China: Oxford University Press.
- China.org.cn, (2006) Online and Adult Education, Retrieved 30 June, 2012 from <http://www.china.org.cn/english/features/China2005/142222.htm>.
- Clarke, T. and Hermens, A. (2001) Corporate developments and strategic alliances in e-learning, *Education + Training*, 43 (4), 256-267.
- Cunningham, S. (1998) Technology and delivery: Assessing the impact of new media on 'borderless' education, *Australian Universities' Review*, 41(1), 10-13.
- Eom, S. (2006) The role of the instructors as a determinant of students: Satisfaction in university online education. *Proceedings of the Sixth IEEE International Conference on Advanced Learning Technologies*, 985-988.
- Retrieved 28 June, 2012 from <http://portal.acm.org/citation.cfm?id=1156327>.
- Ferguson, M. and Ibbetson, A. (2005), The use of online technology in the teaching and learning process: WebCT-communication technology or communication turn-off?, *International Journal of Information and Communication Technology Education*, 1(4), 25-39.
- Gulatee, Y., Combes, B. and Clayden, J. (2011) An investigation of teaching wholly online in a school of computer and information science, *ITALICS*, 10(2), 51-61.
- Hampden-Turner, C. and Trompenaars, F. (1997) *Mastering the infinite game: How fast Asian values are transforming business practices*, Oxford, UK: Capstone.
- Huang, L., Yang, J.M. and Li, W.X. (2011) College blended learning mode of the free Internet service to build - A case study of modern educational technology, *e-Education Research*, 8, 103-108, Central China Normal University, Wuhan, China.
- Jun, J. and Park, J. (2003) Power relationship within online discussion context: based on adult international students' perspective and their participation in the learning context. In D. Flowers, M. Lee, A. Jalipa, E. Lopez, A. Schelstrate, and V. Sheared (eds.), *Proceedings of Adult Education Research Conference 2003*, 193-198, San Francisco.
- Kim, K.J. and Bonk, C.J. (2006) The Future of Online Teaching and Learning in Higher Education: The Survey Says..., *Education Quarterly*, 4, 22-30.
- Ku, L. and Lohr, L. (2003) A case study of Chinese students' attitudes toward their first online learning experience, *Educational Technology Research and Development*, 51(3), 94-102.
- Luo, Y.Z. and Zhang, Z.H. (2009) On-line learning and face-to-face combined with the college English teaching mode to autonomous learning ability, *Gansu Science and Technology*, 3, Gansu.

- Madden-Hallett, H. and Ho, H.W.L. (2008) Who prefers what? The effectiveness of Blackboard for on-campus marketing students in Singapore, *Proceedings of The Australian & New Zealand Marketing Academy Conference (ANZMAC)*, Dunedin, New Zealand.
- Ngai, E.W.T., Poon, J.K.L. & Chan, Y.H.C. (2007) Empirical examination of the adoption of WebCT using TAM, *Computers & Education*, 48, 250-267.
- Nisbett, R.E. (2003) *The geography of thought: How Asians and Westerners think differently and why*, New York: The Free Press.
- Potter, G. (2003) A comparison of Chinese and Western distance education
- Pratt, D.D. (1992) Chinese conceptions of learning and teaching: A Westerner's attempt at understanding, *International Journal of Lifelong Education*, 11, 310-319.
- Ryan, Y. (1998) Time and tide: Teaching and learning online, *Australian Universities' Review*, 41(1), 14-19.
- Salmon, G. (2005) 'Flying not flapping: a strategic framework for e-learning and pedagogical innovation in higher education institutions', *ALT-J, Research in Learning Technology*, 13(3), 201-218. <<http://www.researchinlearningtechnology.net/coaction/index.php/rlt/article/viewFile/11218/12911> >
- Scagnoli, N.I., Buki, L.P. and Johnson, S.D. (2009) The influence of online teaching on face-to-face teaching practices, *Journal of Asynchronous Learning Networks*, 13(2), 115-128.
- Skinner, B. (2010) Online discussion: Can it help international students ease into British university life? *Journal of Studies in International Education*, 14(4): 335-354.
- Tu, C. H. (2001) How Chinese perceive social presence: An examination of interaction in online learning environment, *Education Media International*, 38, 45-60.
- Wang, H.D. (2006) Teaching Asian students online: What matters and why?, *PAACE Journal of Lifelong Learning*, 15, 69-84.
- Xu, X.H. (2011) Online learning system based on cooperative learning curriculum reform design, *Journal of Zhejiang Wanli University*, 3, Ningbo, Zhejiang, China.
- Yao, O. (1994) *Consumer behaviour in China: Customer satisfaction and cultural values*, London: Routledge.
- Yao, Q.H. (2010) Students online learning research, *Educational Research*, 7, Liaoning Normal University, Dalian, China.
- Zhang, K. (2005) China's online education: Rhetoric and Realities, in Carr-Chellman, A.A. (ed.), *Global Perspectives On E-Learning: Rhetoric And Reality*, Sage Publications, 21-32.
- Zhu, Z.T., Gu, X.P. and Wang, Q.Y. (2003) A panorama of online education in China, *Educational Technology*, 23-27.