

CROSS-CULTURAL LEARNING CHALLENGES AND TEACHING STRATEGIES FOR FIRST-YEAR ASIAN STUDENTS IN AUSTRALIAN UNIVERSITIES

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Abstract: With the dramatic increase in the number of Asian students in the past few years, the cross-cultural teaching and learning situation becomes an important issue in Australian universities. To tackle this issue, we conducted a survey to students studying Information Technology and Business courses in five Australian universities. A total of 639 international students and 387 local students completed the questionnaire survey. Our survey results revealed a number of learning challenges facing international students, especially first year Asian students. Student and staff interviews were also conducted to discover further facts that may not be covered by the questionnaire, and to check whether or not the survey (and interview) results represent the similar view from the staff side. The initial interview outcome, based on an incomplete number of interviews, generally supported the findings from the student survey. This paper is to examine the challenges, especially those from language and cultural aspects that face Asian students studying in Australian universities, and summarize some responses to relevant survey/interview questions from both local and international students. Some teaching strategies on how to improve language ability and classroom skills for first-year Asian international students are initiated.

1 INTRODUCTION

Over the past two decades Australian tertiary education has attracted a large number of international students. Most international students in Australian universities come from Asian countries and therefore have different cultural backgrounds from the majority of Australian local students and teachers. Many facts show that cultural factors have obvious influences on many aspects of the teaching and learning as well as the working relationship between staff and students and also among students themselves. In such a cross-culture environment, teachers and students may have different

expectations in their interaction and different teaching and learning understandings (Green 2007, Hodne 1997, Ho, 1991). The difference of languages is the most important issue in a cross-culture environment, however the evidence obtained from a survey (Lu et al 2008) proves that not only language problem can generate confusion, but different ways to think and perspective to the roles of teacher and student in the education process can also generate it (Chen, 2003). It becomes a significant study for both Australian local teachers and international students to explore more effective and suitable teaching and learning approaches in a cross-cultural education environment.

Although the development of researches on cross-cultural teaching and learning is growing, most researches in this field only focus on the issues of language, communication, specific courses and differences in learning styles (Asmar 1999, Watkins 2000, Wei 2007). There is little research to investigate the degree of implications on teaching and learning brought by culturally specific assumptions and situational variables. Therefore, there is an urgent need to explore current new cross-cultural teaching and learning situations and to develop more suitable approaches to help improve teaching and learning practices of Asian students in high education of western countries.

This study tends to identify the positive and negative influence of the trend of increase of cross-cultural students on teaching and learning approaches under Australian educational environment.

We conducted student questionnaire survey in five Australian universities (i.e., University of Technology Sydney, Curtin Universities, The Sydney University, Edith Cowan University and Southern Cross University) in 2008. As Business and Information Technology have the majority of Asian international students we therefore selected the two types of schools/faculties in the above five universities to conduct the survey. We received 1026 complete student questionnaires, including both undergraduate students and postgraduate students; and Australian local students (37.7%) and International students (62.3%) from other 56 countries. We have conducted data analysis such as correlation analysis. Some interesting results have been obtained which are very useful for both teachers and students on teaching and learning in a cross-cultural environment.

We also conducted student and staff interview to verify and complement the findings from the survey. This paper concentrates on data analysis of survey data as well as a part of initial interview responses in relation to language and culture factors, in particular the language challenges facing Asian international students studying in Australian universities. A set of suggestions will be made to help Asian international students to improve their language ability and class room skills.

The rest of the paper is organized as follows. Section 2 reviews literature on cross-culture teaching and learning. Section 3 presents the language challenges that face International students studying in Australian universities, by presenting a set a data analysis results. Teaching method related findings from the survey and initial interview responses are

presented in Section 4. Section 5 concludes this paper.

2 LITERATURE REVIEW

Cross-cultural education has been studied by some researchers in the past years. Related research reported in literature involves language issues, textbook and knowledge authority, teaching methods, learning attitudes and styles, as well as the relationships between teachers and students.

For example, in students' attitudes to authority, literature review indicates that students from Confucian-heritage cultures are modest and compliant. They are highly dependent on text books and lecture notes. Hong (1991) stated that "respect for the elderly and books is the central idea of Chinese education." It was further stated that this "also means respect for authority, classics and experience". Asian students are more influenced by the childhood education that is you just need to do what a teacher asks you to do and you do not need to have your own idea. This makes that many Asian students are more introverted (Huang and Trauth, 2007). Chiu (2009) argues that the students who come from Confucian Heritage Countries have no wish to express critical thinking, which is opposite to western countries students.

In students' learning attitudes and styles, perceptions of learning, Phillips, Lo and Yu (2002) point out that there are three kinds of approaches in terms of learning: (1) Surface approach in which students memorize the key information with minimum of time in order to achieve the best effect; (2) Deep approach in which students want to understand the underlying structure and meaning because of their interest, and they have to access to the knowledge which is below the surface; (3) Achieving approach in which students do their best to fulfill the tasks in order to obtain other people's praise. They found that Chinese students often use different approaches. Demanding examinations may lead them to use surface approach. The traditional Confucian heritage promotes them to use deep approach. Achievement motivation promotes them to use achieving approach (Phillips et al., 2002). Some other investigators hold the view that students in East and Southeast Asian countries typically rely on rote learning and memorization (Baumgart and Halse, 1999). This kind of learning style only results in low-level cognitive outcomes. In contrast, western countries pay more attention on deep learning over surface ones (Biggs, 1996). It is accepted widely that

western learners are independent, favoring deep and cultural learning and encouraged to use constructivist approaches whereas Asian learners are more docile, compliant and good at rote memorization attached with surface approaches to learning (Baumgart et al., 1999). However, researchers have found that Asian research students have high performance during their study in western universities, which shows they applied the deep approach and achieving approach in their learning.

In students' attitudes to working in groups, Littlewood (2001) and Hofstede (2001) found that people who come from Australia, Europe and North America perform strongest individualist orientation, whereas people who come from Latin America and East Asia perform strongest collectivist orientation. The individualism people value self-fulfillment and freedom of choice and claim his or her rights over the interests of in-groups to which he or she belongs (Li et al. 2008). On the other hand the collectivism people's identity attitudes and actions are determined by the groups. They value the interests of in-groups to which they belong to over their own individual interests. Fussell et al. (2007) believe that comparing with individualist in western countries, eastern countries highly valued communal well-being and harmony. Similarly, Pan et al. (1994) point out American culture emphasizes on individualism, and equality and freedom. Some scholar argues western students prefer working alone, Asian students like working together. "It is important evidence that western students are more independent. They are more likely to work according to their own ideas whereas students from China, Japan or other Asian countries prefer work together (Hofstede, 2001)."

In language and communication aspects, both students and teachers are aware of the fact and agree that many international students require English language support in Australia (Chalmers and Volet 1997, Eisenhlaus and Trevaskes 2003). Tiong and Yong (2004) state that Asian international students become silent in group discussion and in the classroom because of Asian students' inadequate language skills and their underdeveloped interpersonal communication skills. Some scholars also examine the methods which can help international students to improve their language skills (Briguglio 2000).

3 LEARNING CHALLENGES TO ASIAN STUDENTS

Under the support of an Australian Learning and

Teaching Council (ALTC) grant we have conducted a survey by questionnaire in Information Technology and Business courses in five Australian universities. A total of 1026 questionnaires were received from students. These students have their educational backgrounds in Australia and other 56 countries. The distribution data analysis shows that within the 1026 complete questionnaires, there are 387 local students (that is, they completed most of their education in Australia) and 639 international students who complete most of their study in other 56 countries. Of these students, there are totally 652 undergraduate students and 374 postgraduate students. These students are in the majors of Business (52.5%), Information Technology (28.5%), and others (18.9%, in the group, many of them have Information Technology and business as a sub-major). In this project, international students are mainly students from Asian cultural background.

A series of interviews have also been conducted as a complement method to discover further facts including culture related issues in relation to Asian international students learning in Australian universities. We interviewed three groups of people, i.e., Asian-background international undergraduate students, postgraduate students, and teaching staff, respectively, in the above mentioned universities.

3.1 Language and Culture Challenges: Facts from the Survey

The survey questionnaire includes 55 questions within six sections as follows: (I) Teaching contents and textbooks; (II) Teaching and learning methods; (III) education management systems; (IV) language; (V) culture-based teaching & learning concepts; and (VI) others. This section only analyses some typical questions to compare language and culture challenges facing Asian background international students with that of Australian local students. Data analysis results are based on results from (part of) survey sections (II), (IV) and (VI).

Our survey data indicated that language problem is the main obstacle to prevent (Asian) international students from achieving excellent performance in their study process. Questions on language include if the main reason of communication difficulty is language; do international students have difficulties in understanding lecture due to language; do they have language related difficulties in completing homework/assignments; do they have confidence to take part in in-class discussions and asking questions; do they feel difficult when they perform oral presentations in class.

Similar to many other researches conducted in Australian universities (see Briguglio 2000, for example), our survey data shows that the language and communication skills are the main burden to first-year Asian background students, though these difficulties decrease in late stage of their university study. Figure 1 indicates that about 38% of the international students rank the language difficulty as their main difficulty in the first year of their study in Australian university.

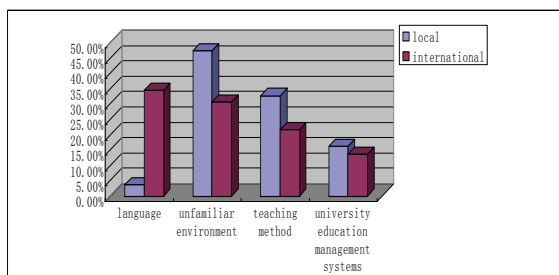


Figure 1: The main difficulties students encountered in their first-year study at university.

Figure 2 shows that this rate decreases in the second, third and fourth year of their course study, however the language difficulty still dominates, among other difficulties, for about 25% of international students. In other word, one in four international students experience language difficulty in the whole course of their study in Australian university.

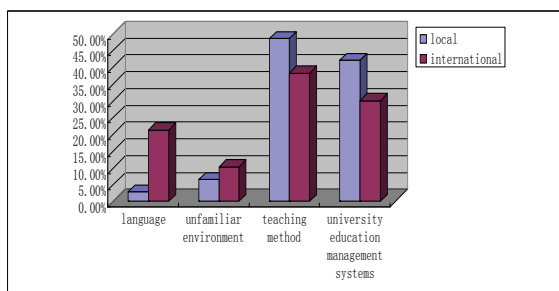


Figure 2: The main difficulties students encountered in their second, third and fourth year study at university.

Figure 3 shows the students' view of their communication difficulties. While about 36% of international students are not confident in using English language, more than 50% of international students feel difficult in communicating to others (students or staff) due to lack of common interesting, which, in most cases, is due to language difficulties and cultural difference.

We also investigated the detailed language and culture related communication issues in the survey. Our results show that more than 20% of international students do not understand lectures or cannot understand lectures in most of time, while some 32% international students have difficulties in taking notes during lecture; nearly 50% international students need some help in completing their homework. Among those students, about 7% of them even need to translate into their first language before attempting the homework.

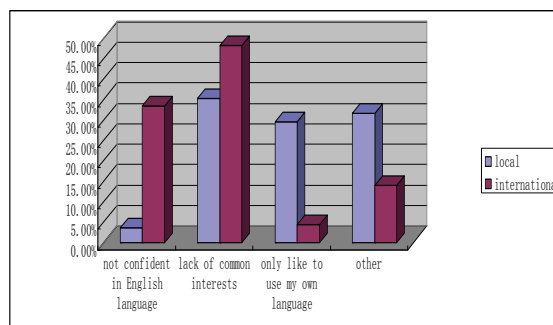


Figure 3: The main difficulties students think in communicating.

Regarding to in class discussion, results show that more than 50% international students are not very confident to their English when trying to participate in classroom discussion, in which nearly 10% students are not confident to their English at all thus they do to participate in classroom discussion. In addition, while about half of international students can do in class presentation after practice, more than 11% international students need help from others for their in-class presentation. As comparison, majority (i.e., near 90%) of local students have no problems with their in-class presentation skills.

3.2 Language and Culture Challenges: Facts from the Interview

The interview, as a compliment method, was conducted to verify and complement the main findings of the survey. The interview, as a compliment method, was conducted to verify and complement the main findings of the survey. The interviews were done in three groups: undergraduate Asian international student interview, postgraduate Asian international student interview, and teaching staff interview. All students who participated in the interview were requested to fill in the survey questionnaire if they didn't do so in our survey stage. As such, student interview is to find some more

detailed facts that may not be covered in the questionnaire. And staff interview is to check whether or not the student survey (and student interview) results represent the similar view from the staff side. Detailed interview results will be published in another paper.

Based on an incomplete number of interviews (i.e., interview done from Edith Cowan University only), we have found some interesting results. Not surprisingly, both students and staff agreed that English language support is needed for many international students, especially for first-year Asian non-English background international students. While most Asian international students experienced some level of language difficulties in all four macro-skills of listening, speaking, reading, and writing in their first-year study, the interview results confirm that speaking and writing skills of many Asian international students are not to the standard. Poor speaking (or communication) skill prevented these students from being able to confidently ask questions during lectures, or to express their idea in class discussion. Some Asian international students indicated that they were not confident that their speech could be easily understood by their lecturer/tutor and local students. Poor writing skills resulted in poor quality of assignment, which, most of them believe, was one of the main reasons that they often receive lower assignment marks than other students.

Some Asian international students also indicated that they experienced listening difficulties in their first year study in Australian university. While they thought their English was not too bad in their English course before getting into Australian university, they found them wrong after entered the university. Some of them had certain difficulties in comprehending lectures and tutorials, and/or had difficulties in class discussions because local teachers/students speak too fast and other international students from other countries may have strong accent in English. Due to these reasons, some of them indicated that they were reluctant to speak in lecture/tutorial sessions and/or in class discussion. Reasons include: they felt not confident with their speech; their spoken English was not as fluent as that of local students; they were shy about speaking up; they did not want to challenge lecturers/tutors because their culture does not encourage this in classroom; they felt more comfortable with lecturer-centre approach but not with the student-centre approach, and so on.

4 STRATEGIES TO IMPROVE FIRST-YEAR ASIAN STUDENTS' ENGLISH ABILITY AND CLASSROOM SKILLS

Teaching and learning method is one of the most important parts in the questionnaire. Related questions in this part include: If students feel that the current teaching methods are suitable; what are the main differences of teaching methods between Australia and their home countries; whether they like lecturers ask questions in classes; what aspects of teaching the students are most concerned about; and how students satisfy with the teaching methods in their current subjects, and so on.

Our survey data show similarity between local student group and international student group in a few aspects of teaching methods. For example, both local and international students prefer the teaching methods such as face-to-face teaching, case-study, fewer lecturer and more labs, etc. However both groups were less interested in self-learning method.

When seeking local and international students' opinions on teaching activity arrangement and assessment settings, we saw different opinions for some questions. For example, more international students than local students (25.9% vs. 14.2%) are in favorite of statement "*fewer questions from students*". On the other hand, more local students than international student (48.5% vs. 39.7%) are in favorite of statement "*fewer group assignment*". Meanwhile, more local students than international (44.7% vs. 35.1%) object to statement "*lecturer arrange assignment groups*". The most significant difference in opinions between the two groups lies in the statement relating to mixing work groups between local and international students. While both local and international students (49.1% and 51.5%, respectively) show being interested in "*working with local students*", the two groups show significant difference in statement "*working with international students*" – while 47.9% of international students in favorite of this statement, only 16.7% local students shows agreement to it. Detailed agreement rates to individual statements can be seen from Figure 4.

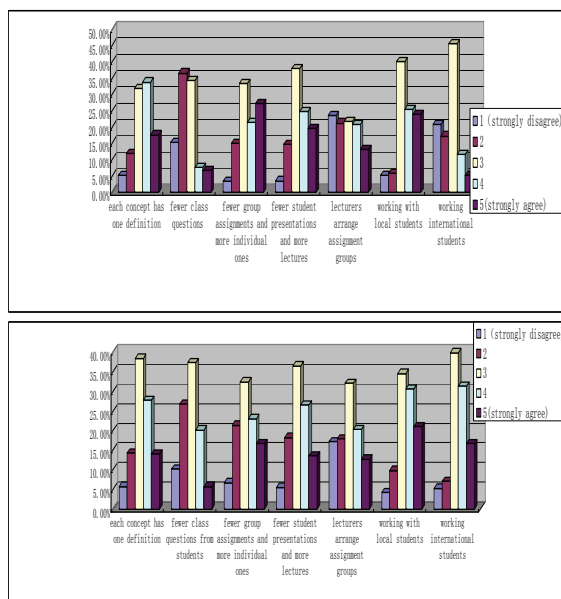


Figure 4: Local (up) and international (bottom) students' opinion to individual statements.

Both the survey and interview results show the need of improving international students' English language ability, especially in their first year study in Australian university. While this is a complex issue, most students and staff agreed that, apart from university level English support programs offered, teaching staff can do something in their teaching activities to help international students about their English ability. Based on some students' suggestions and authors' teaching experience, following suggestions are made:

- For lecture/tutorial sessions, lecturers should invite specific international students to participate in discussion or asking/answering questions, after giving adequate time for them to reflect on what to say; encourage international students to respond to in-class discussion from both the teacher and fellow students.
- Lecturers should be encouraged to mix local and international students when forming groups or make a structured intervention for forming groups wherever possible.
- Lecturers should set aside one-to-one consultation time, or provide office hours for clarifying and explaining material that students did not fully understand in class. Instead of answering questions via emails, lecturers should encourage face-to-face consultation.

5 CONCLUSIONS

As a part of our ALTC research outcomes, this paper examined the challenges, especially from language and culture background aspects, that face Asian international students studying in Australian universities. We summarized the responses to a set of relevant survey questions from both local and international students. Some initial interview comments in these aspects from both Australian university teaching staff and Asian international students were also analyzed. The findings of the study will help Australian universities in making more aimed cross-culture teaching and learning strategies, which will further help local lecturers improve their teaching quality in cross-culture environment, and at the same time help our international students effectively overcome their difficulties and frustrations caused by cultural barriers in their learning practice.

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FOREWORD

This volume contains the proceedings of the 2nd International Conference on Computer Supported Education (CSEDU 2010), organized by INSTICC – the Institute for Systems and Technologies of Information, Control and Communication, technically co-sponsored by the Spanish Chapter of the IEEE Education Society and the Interdisciplinary Institute for Collaboration and Research on Enterprise Systems and Technology (IICREST), and in cooperation with the Workflow Management Coalition (WfMC), and ACM SIGITE.

CSEDU is becoming an annual meeting place for presenting and discussing educational paradigms, best practices and case studies on innovative computer-supported learning strategies, institutional policies on technology-enhanced learning including learning from distance, supported by technology. The Web is currently a preferred medium for distance learning and the learning practice in this context is usually referred to as e-learning or technology-enhanced learning. CSEDU 2010 is expected to give an overview of the state of the art in technology-enhanced learning and to also outline upcoming trends and promote discussion about the education potential of new learning technologies in the academic and corporate world.

This conference brings together researchers, engineers and practitioners interested in methodologies and applications related to the education field. It has six main topic areas, covering different aspects of Computer Supported Education, including “Information Technologies Supporting Learning”, “Learning/Teaching Methodologies and Assessment”, “Social Context and Learning Environments”, “Legal and Cultural Management Issues”, “Domain Applications and Case Studies” and “Quality, Evaluation and Accreditation Policies”. CSEDU is held in conjunction with WEBIST, the International Conference on Web Information Systems and Technologies, providing a synergetic environment for delegates from both conferences, as many current and future issues and applications of Computer Supported Education are clearly related to the Web. This joint conference format may continue for future events.

CSEDU 2010 received 304 paper submissions from 64 countries in all continents. A double-blind review process was enforced, with the help of the 143 experts who are members of the conference program committee, all of them internationally recognized in one of the main conference topic areas. After reviewing, only 30 papers were selected to be published and presented as full papers, i.e. completed work (8 pages in proceedings / 30’ oral presentations) and 79 papers, describing work-in-progress, were selected as short papers for 20’ oral presentation. Furthermore there were also 46 papers presented as posters. The full-paper acceptance ratio was thus 10%, and the total oral paper acceptance ratio was less than 36%. These ratios denote a high level of quality, which we intend to maintain or reinforce in the next edition of this conference.

The high quality of the CSEDU 2010 programme is enhanced by three keynote lectures, delivered by distinguished guests who are renowned experts in their fields, including (alphabetically): Michael Gould (ESRI, U.S.A.), Hermann Maurer (Graz University of Technology,

Austria) and Robert M. Panoff (The Shodor Education Foundation, U.S.A.).

For the second edition of the conference we extended and ensured appropriate indexing of the proceedings of CSEDU including DBLP, INSPEC, EI (expected) and Thomson Reuters Conference Proceedings Citation Index (expected). Furthermore, all papers will soon be available at the SciTePress digital library.

Building an interesting and successful program for the conference required the dedicated effort of many people. Firstly, we must thank the authors, whose research and development efforts are recorded here. Secondly, we thank the members of the program committee and additional reviewers for their diligence and expert reviewing. We also wish to include here a word of appreciation for the excellent organization provided by the conference secretariat, from INSTICC, who have smoothly and efficiently prepared the most appropriate environment for a productive meeting and scientific networking. Last but not least, we thank the invited speakers for their invaluable contribution and for taking the time to synthesize and deliver their talks.

Looking forward to an inspiring world-class conference and a pleasant stay in Valencia for all delegates, we hope to meet you again next year for the 3rd CSEDU, details of which will be shortly made available at <http://www.csedu.org>.

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