

Strategies and Approaches to Teaching and Learning Cross Cultures

Final Report

2010

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Support for this project has been provided by the Australian Learning and Teaching Council, an initiative of the Australian Government Department of Education, Employment and Workplace Relations. The views expressed in this report do not necessarily reflect the views of the Australian Learning and Teaching Council Ltd.

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2010

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0 Executive Summary

Australian tertiary education has attracted a large number of international students, particularly from Asia. Cultural factors have affected the quality of learning of international students and the teaching approaches adopted by Australian lecturers. Therefore, cross-cultural teaching and learning situations have become an important issue in Australian universities. This project intends to identify the influence of the trend towards increasing numbers of cross-cultural students on teaching and learning approaches in an Australian educational environment. It aims to improve the understanding of Asian students' cultural backgrounds, their previous learning approaches and their perspectives on Australian culture and modes of education, with the objective of helping international students to overcome the difficulties of cross-cultural study. In the process, we anticipate bringing new ideas to lecturers and education managers to improve the quality of cross-cultural teaching and learning. We also expect to develop strategies through recognising the factors which influence teaching and learning in the cross-cultural environment, and to propose a set of guidelines and suggestions that can enhance the quality of teaching and learning in Australian universities.

In 2008, we conducted a student questionnaire survey at the University of Technology, Sydney, Curtin University of Technology, The University of Sydney, Edith Cowan University and Southern Cross University. As Business and Information Technology attract the majority of Asian international students, we selected these two schools/faculties in the five universities within which to conduct the survey. We received a total of 1026 completed student questionnaires from undergraduate and postgraduate students, of whom 37.7% were Australian local students and 62.3% were international students from 56 other countries. We conducted data analysis, including frequency analysis and correlation analysis, to test designed hypotheses. Following the survey, we conducted 50 interviews in the five universities to obtain more detailed information about teaching and learning issues in a cross-cultural education environment and to further understand the needs of students of Asian background in depth. The interview participants included 10 lecturing staff, 25 students of Asian background, seven Australian local students and eight graduates of Asian background. The interview data was analysed by word-based text mining and other qualitative approaches.

Based on the survey and interview data collected, our study found that international students experience significant cross-cultural and language difficulties in their learning process.

Their cross-cultural learning difficulties manifest in the following ways:

- The teaching methods used in Australian universities, specifically in classroom interaction and face-to-face teaching, are significantly different from those used in Asian countries. Open questions show that some 53% of international undergraduate students and 57.87% of international postgraduate students indicated that the main difference between the universities in their home country and Australia is in the teaching methods. These students have difficulty in readily accepting Australian teaching methods, particularly in their first year at Australian universities. Many of them prefer more face-to-face teaching and fewer student questions or class discussions during lectures. Some Asian students consider it to be a mark of appreciation and respect for their teachers for students to listen attentively and quietly in class. They consider that all discussion should take place after classes as any discussion will impinge on the teacher's lecture time, resulting in reduced knowledge transmission to students, with the consequence that students will learn less.



- In their approach to learning, many students of Asian background dislike insisting on their own opinions when they conflict with those of the teacher. They sometimes have difficulty or don't like asking questions to their lecturers directly in class. These issues result largely from the students' cultural background. In some Asian countries, teachers ask questions in class to check students' understanding of the content they are teaching, rather than encouraging critical thinking. This is the main reason why students of Asian background ask fewer questions in class.
- Students from different cultural backgrounds have different attitudes to working in groups. Our data shows that Asian students have a similar level of participation in group work and group assignments as non-Asian students, but are less likely to offer different ideas because they value group harmony and respect for authority without argument. However, they often work as a team after classes to help each other and share their understanding of the subjects they have covered in their daily study.
- The learning methods used in Australian schools are significantly different from those used in their Asian counterparts. The survey results show that Asian undergraduate students rely more on rote learning and memorisation than postgraduates. In contrast, postgraduate students participate more in a variety of team work and experience better academic achievement. Indian students, who constitute one of the biggest international student communities, generally have better English skills than students from other Asian countries. They prefer an indirect communication style, whereas Chinese students prefer a capabilities-based communication style such as e-mail, because their reading and writing skills are in general better than their listening and speaking skills. When they have been unable to fully comprehend what the teacher talked about in class, they will read the textbooks and lecture notes after class as compensation.
- Some Asian students explain that because of underdeveloped interpersonal communication skills, they seldom express themselves in class and group discussion even they know the answer and hold personal opinions. As an example, in group assignments, Asian students are almost always found to be in charge of reading-based tasks such as data collection, or a literature review, rather than presentations. There are very few Asian students who are group leaders (even they were leaders in their home countries).

English language difficulties affect international students in the following learning activities:

- Reading the textbook – more than half the international students surveyed experience difficulties in reading and understanding textbooks due to English language problems; they therefore read less of the recommended textbooks.
- Working in a group – due to language problems, many Australian local students are not in favour of working in groups with international students. For the same reason, international students generally would prefer to work in groups with other international students.
- Understanding lectures – most of the international students surveyed have difficulties with listening to lecturers and taking notes at the same time due to their language problems.
- Completing homework – approximately half the international students surveyed need help with their English-related difficulties when completing their homework/assignments.



- Participating in class discussions – more than half the international students surveyed do not feel confident about participating in class discussions.
- Class presentations – only a small percentage of international students are confident in class presentation due to their language difficulties.

Apart from the language problems, our study also found that an unfamiliar environment, different teaching methods and culture shock are the main difficulties experienced by first-year international students.

Details of our findings are outlined in Chapter 6 of this report. Based on these findings, we have devised guidelines for lecturers and education managers to further improve the approaches to teaching/managing students from diverse cultural backgrounds, as well as guidelines to assist students of Asian background to develop better study strategies in their cross-cultural learning environments. The results have been evaluated and are being communicated to the community.

This report has 10 main parts, as follows:

1. Project outcomes
2. Research approach and methodology
3. Background and literature review
4. Survey data analysis
5. Interview data analysis
6. Findings
7. Guidelines for lecturers and education managers
8. Guidelines to assist students of Asian background
9. Disciplinary and interdisciplinary linkages that emerged as a result of the project
10. Results communication, publications and evaluation



1 Project Outcomes

The outcomes of this project include data analysis results and findings drawn from student/staff surveys and interviews and two sets of guidelines/suggestions that can be used in the teaching and learning development programs of our universities/departments:

1) Guidelines and suggestions to lecturers and education managers to further improve the approaches to teaching/guiding students from diverse cultural backgrounds, to manage their expectations, and to develop related strategies to improve the quality of teaching.

2) Guidelines and suggestions to assist students of Asian background to develop better study approaches for cross-cultural learning, including examples of the experiences of successful Asian graduates from Australian universities.

3) The report covers the following key areas:

- ❖ Research methodology of this project including questionnaire design, survey conduction, interviews, and quantitative and qualitative data analysis.
- ❖ Data analysis-derived findings regarding differences in assumptions between students and staff of different cultural backgrounds relative to what constitutes learning, the perspective of teaching style, and differences in the expectations of the lecturer and student in the teaching and learning process.
- ❖ Discussion on the need for extra resources or support to address issues arising from the cross-cultural characteristics of the student cohort based on the particular learning difficulties and frustrations, and on improving the quality of teaching and learning in our universities, if appropriate.
- ❖ Analysis of the found factors and issues that motivate cross-culture students to pursue their learning, to cope with the difficulties in the classroom and other learning activities, and the factors that contribute to the success of their learning.

In the following sections, these outcomes will be presented in detail.



2 Research Approach and Methodology

This project applied both quantitative and qualitative study methodologies. It applied a questionnaire-based structured survey and semi-structured interviews to obtain data. It then applied numerical/linguistic data analysis approaches to find results. The questions used in the surveys were designed based on hypotheses proposed within an overarching action research framework. The interviews were conducted after an initial phase of data collection via the questionnaire survey.

Data was drawn from staff, undergraduate/postgraduate international/local students and graduates mainly within the Information Technology and Business departments/faculties of the University of Technology, Sydney, Curtin University of Technology, The University of Sydney, Edith Cowan University, and Southern Cross University.

The total number of participants in the survey is 1026, including 640 international students of Asian background and 386 students from Australia or other western countries. The interview participants include 10 lecturing staff, 25 students of Asian background, 7 Australian local students and 8 graduates of Asian background. The survey and interview participants combined total 1076.

This project was completed in two years (10/2007-10/2009) in the following steps.

Step 1 Continued literature review and developed ethics applications

Based on our pre-literature review results, we continued the literature review by further focusing on cross-cultural issues in higher education within the teaching/learning process. Asian cultural background is the main focus of the review. A more detailed literature review is presented in Section 4 of this report.

As the surveys and interviews conducted in this project involve personal information, an ethics application was first submitted to the UTS Human Research Ethics Committee and then to Curtin University of Technology, The University of Sydney, Edith Cowan University and Southern Cross University for approval.

Step 2 Establishment of a framework for factor analysis in cross-culture teaching and learning

Based on the literature review and our previous research, we summarised the main impact factors, and the possible assumptions and expectations of both students and lecturing staff, and developed a research framework. This framework identified five aspects of cross-cultural teaching and learning in universities. Under the framework, we designed and proposed 59 hypotheses. The aim was to find out how differing expectations/assumptions affect the progress of learning over its various phases, and how they impact on the quality of experience and outcomes in our universities and how to assist cross-culture students becoming successful learners.

Step 3 Development of preliminary questionnaire

Based on the 59 hypotheses, the questionnaire consists of an identification information section and over 50 questions within other six sections as follows:

- (1) Teaching Contents and Textbooks;
- (2) Teaching and Learning Methods;
- (3) Education Management Systems;
- (4) Language;
- (5) Culture-based Teaching & Learning Concepts; and
- (6) Others (open questions).



The identification information section includes the educational degree of respondents; study field of respondents; how long the respondents have studied in Australia; birth country of respondents; first language of respondents; and which country respondents were mainly educated in. This information helps to identify the respondents' major and the cultural background the respondent belongs to.

In this study, 'international student' is identified as the student who has completed most of the education in countries other than Australia. This definition is the most suitable for the Australian immigration situation. From the data obtained in this project, over 90% of international students are Asian students. Therefore, "international students" in this report means international students of Asian background.

Below we will discuss the approach we used to design questions under the five main aspects identified above:

(1) In the teaching content and textbooks aspect of the questionnaire, we assumed that textbooks have different degrees of importance and are used in different ways in different cultural backgrounds. In some countries, teachers use textbooks a lot in their subjects and students mainly follow textbooks for their study. However, in other countries, teachers do not use textbooks or use only very limited selected parts of textbooks in their subjects. They prefer to design their personal lecture notes and just give students slides in the classroom and references for reading. Therefore, students from different countries have different attitudes and behaviours towards the use of textbooks. This part of the survey aims to obtain feedback about students' attitudes to teaching content and textbooks. Some examples of questions include: how students evaluate textbooks; the difficulties they have when they read textbooks; what content students read in textbooks; and if they use textbooks written in another language.

(2) Teaching and learning method is one of the most important issues involved in the questionnaire. It is assumed that international students and local students experience different teaching methods prior to current university study and their learning methods may be also different. This part of the survey is intended to test this assumption. Questions include: whether students feel that the current teaching methods are suitable; what the main differences are between the teaching methods in Australia and their home country; whether they like lecturers to ask questions in classes; what aspects of teaching concern them most; and how satisfied students are with the teaching methods in their current subjects.

(3) International students may have a different education management system in their home country which is adapted to the local cultural background. Therefore, the education management system part of the questionnaire aims to acquire feedback from international students on how they adapt to the Australian education management system. Questions include: experience with the academic credit system; attitude to elective subjects; evaluating guidance within the education management system; and evaluating the degree of satisfaction with the subject selection system.

(4) Language difference is the first problem that will be met by international students. It is the main obstacle preventing international students from improving their performance in the overseas study process. Questions on language include: whether the main reason for communication difficulty is the language; do international students have difficulties in understanding lectures due to the language problem; do international students have language-related difficulties in completing homework/assignments; do international students have the confidence to take part in asking questions and in-class discussions; and do international students experience difficulty when they perform oral presentations in class.



(5) Culture-based teaching and learning concept is another important part of the questionnaire. This part of the survey reflects on whether cultural factors have an influence on teaching and learning, and if so, in what aspects and to what degree do cultural factors influence students. Questions include: what are the criteria of good students from the student's point of view; whether students want to express their opinions in classes; do students care whether they have same ideas as others or not; whether students often argue about grades with their lecturers; whether students prefer working with students from the same cultural background in assignments; whether students have participated in any activities that are not related to their course.

Step 4 Pilot surveys for students

We conducted a pilot survey with a small student samples in the Faculty of Information Technology, University of Technology, Sydney in early 2008, using the preliminary questionnaire designed. The questionnaire was then revised based on feedback obtained from the pilot survey.

Step 5 Conducted survey using revised questionnaire in all five universities

We applied the revised questionnaire to conduct a survey in the Information Technology and Business academic units at the University of Technology, Sydney, Curtin University of Technology, The University of Sydney, Edith Cowan University and Southern Cross University. We received a total of 1026 completed student questionnaires across the five Australian universities. These students have an educational background in Australia and 56 other countries. The self-administrated questionnaire survey has helped us to seek students' opinions on teaching materia (including textbooks, lecture notes, tutorial questions, and so on), the education management system, learning methods, teaching methods (mainly in class), assessments and communication.

Step 6 Survey data analysis

The data collected from the survey have been analysed using standard statistical means such as correlation analysis, and advanced approaches such as text mining methods. The set of hypotheses proposed was also tested and analysed. As the survey was conducted in five universities within IT and business faculties and for both postgraduate and undergraduate Asian students, the collected data has been analysed comprehensively as well as for each individual category such as IT, non-IT, and business fields. More detailed discussion can be found in Section 5.

Step 7 Conducted staff/student interviews

Based on the results obtained from the above surveys and the hypotheses constructed, we designed a set of interview questions and conducted semi-structured interviews in the five universities in order to further identify some related key issues and further understand the needs of students of Asian background in depth. These interviews aimed to draw original and detailed opinions from students to evaluate the results obtained from the above questionnaire-based survey.

We designed four sets of interview questions:

- ❖ interview questions for selected students of Asian background. This set of questions is based on the survey results and concerns the student's feelings and experiences in the five categories of textbooks, education management system, learning method, teaching method, assessments and communication. The



questions aim to discover their assumptions/expectations about knowledge, learning, and in the influences within a cross-culture education environment.

- ❖ interview questions for teaching staff. These questions aim to unearth their assumptions/expectations about knowledge, learning and teaching that influences the relationship between lecturer and the student of Asian background within a cross-culture education environment. The interviews were conducted in such a way that the interviewees talked about their thoughts, feeling and experiences around the designated interview questions.
- ❖ interview questions for Australian students. This set of questions is also based on the survey and aims to establish their assumptions/expectations about the knowledge, learning and teaching in a cross-culture education environment.
- ❖ interview questions for graduates of Asian background graduates. These questions aim to discover their previous learning experiences with in a cross-culture education environment and to identify successful cases which can be used in our student guidelines.

Step 8 Interview data analysis

A total of 50 people from the five universities participated in the interviews, including 10 lecturing staff, 25 students of Asian background, 7 Australian local students and 8 graduates of Asian background. Interview data was analysed by a set of qualitative analysis methods. More details are discussed in Section 6.

Step 9 Final data analysis, findings and evaluation

The results from survey data analysis and interview data analysis are compared and combined for a comprehensive analysis. Key effects on the progress of learning over its various phases and their impact on the quality of experience have been summarised and finalised. Identified factors that influence teaching and learning in a multicultural environment provide a basis from which findings can be obtained, and upon which guidelines and suggestions can be made to improve the quality of teaching and learning in Australian universities.

Step 10 Completion of guidelines and final report

We have completed two sets of guidelines/suggestions for staff and students respectively based on the analysis results. See Sections 7 and 8 of this report for details. In the report, we present the research methodology we used, the data analysis results obtained, and also the findings on different expectations between teachers and Asian students, and the need for extra resources or support for the student cohort based on their learning difficulties and frustrations.

Step 11 Communication of results:

The comprehensive report with two sets of guidelines/suggestions are being communicated to academics and managers in related universities, and also relevant government departments, through giving public seminars to workshops, conferences, and submitting this report to universities and ALTC.

We have completed six papers for international conferences and forums to report our findings of this project and to obtain very positive feedback from experts and academics. We are completing another three papers for international journals and conferences. We have also given presentations in seminars and meetings to distribute the results of the project and obtain feedback and evaluations from various sources including students, lecturers and managers/officers.



3 Background and Literature Review

This Section provides the research background, literature review and our contribution to the literature in the field.

3.1 Background

Over the past two decades Australian universities have been highly successful in attracting students from a range of nationalities and cultural backgrounds into their courses. The trend of increasing numbers of full-fee paying international students is likely to continue. According to www.studiesinaustralia.com in 2008, more than 455,000 international students came to Australia, which is an increase of 19% over 2006. A new report indicates that there are over 46,000 international students in Australia in 2009. Most of these students have come from Asia across all nationalities, for example, 23.5% of students have come from China. The literature also indicates that Australia is the most popular country among Asian students other than the UK and US. (Macleod 2005).

This rapid increase of international students in the Australian higher education sector carries a range of implications for the composition of the student cohort and for teaching, as well as the learning approaches adopted. The extensive experience gained by staff within Australian universities clearly suggests that cultural factors do affect the quality of teaching, learning, and the working relationship between staff and students, as well as the relationships among students themselves. Teacher and student are typically a role pair in education activities, and cross-cultural teaching and learning situations are fundamentally problematic for both parties (Hofstede, 1986; Thomas, 2002; Wan, 2001). When teacher and student come from different cultural backgrounds in which they have different social status, they generally exhibit different expectations in teacher/student and student/student interaction. Thus, many perplexities can arise. Some survey based evidence (Chen, 2003; Lu and Lu, 2006; Page, 2003) suggests that the perplexities result not only from language difficulties, but also from the different assumptions about knowledge, logicity, teaching, learning, and/or about the roles of key players in the education process.

In Australian universities, international students come from many countries mainly Asian countries. From the survey we conducted in the five universities, Figures 3-1 and 3-2 show the distributions of surveyed students by birth countries and by first languages respectively. We can see from Figure 3.1 that China, India, Indonesia, Malaysia and Thailand are the main countries of international student born. We can see from Figure 3.2 that Chinese, Indonesian, Thai, Hindi and Vietnamese are main first languages of international students.



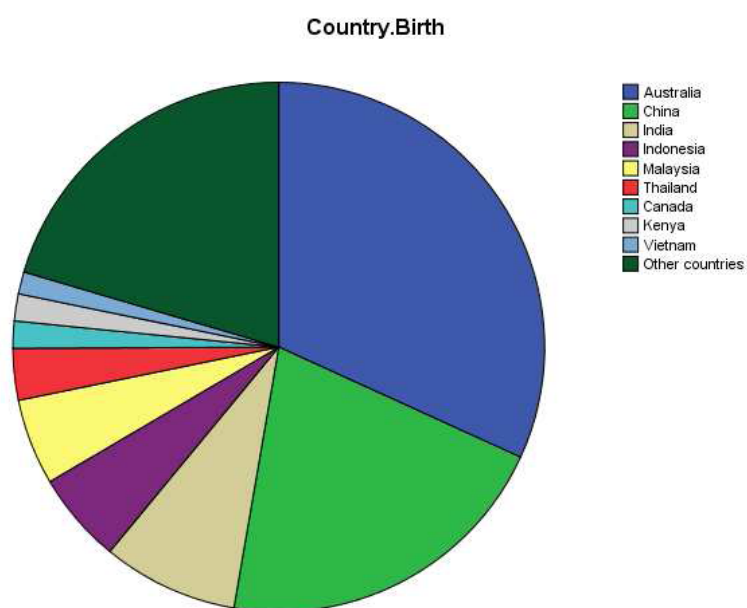


Figure 3.1 Distribution of students by their countries of birth

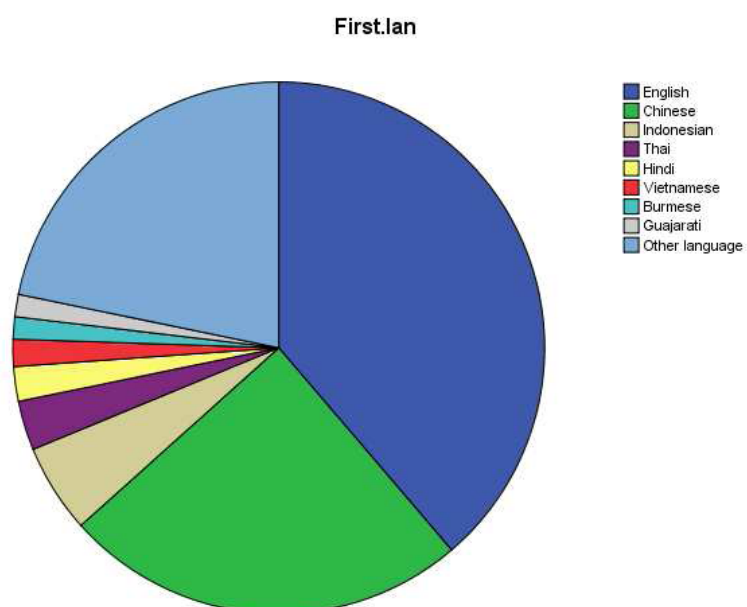


Figure 3.2 Distribution of students by their first language



3.2 Literature review

Cross-cultural education research literature covers a variety of aspects. Here we mainly conduct our review from the following aspects: textbook and knowledge authority, learning methods and attitudes, and language issues, as well as the relationships between teachers and students in a cross-cultural environment, which are related to our student survey results.

Regarding students' attitudes to authority, the literature indicates that students from Confucian-heritage cultures are modest and compliant. They are highly dependent on textbooks and lecture notes. Slay (1999) and Hong (1991) comment that "the respect for the elderly and books is the central idea of Chinese education". It is further stated that this "also means respect for authority, classics and experience". Asian students are more influenced by their 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 ideas. This results in many Asian students being more introverted (Huang and Trauth, 2007). Chiu (2009) argues that students who come from Confucian heritage countries have no wish to express critical thinking, which is opposite to what is required of students in western countries.

In relation to students' learning methods, attitudes and styles, and perceptions of learning, Phillips, Lo and Yu (2002) point out that there are three kinds of approaches in terms of learning: Surface approach, Deep approach and Achieving approach. They find that Chinese and Asian students often use different approaches in different situations. Demanding examinations may lead them to use a surface approach. The traditional Confucian heritage promotes them to use a deep approach. Achievement motivation promotes them to use an achieving approach. Other investigators hold the view that students in east and southeast Asian countries typically rely on rote learning and memorisation (Baumgart and Halse, 1999). This kind of learning style only results in low-level cognitive outcomes. In contrast, western countries pay more attention to deep learning approaches over surface ones (Biggs, 1996). It is widely accepted that western learners are more independent, favouring deep and cultural learning and encouraged to use constructivist approaches, whereas Asian learners are more docile, compliant and good at rote memorisation associated with surface approaches to learning (Baumgart and Halse, 1999). However, researchers have found that Asian research students demonstrate high performance during their study in western universities, which shows that they apply both the deep approach and achieving approach in their learning.

Regarding relationships between teachers and students in a cross-cultural environment, Littlewood (2001) presents his research results that "Asian students are more ready than European students to accept the traditionally dominant role of the teacher. It may be that this tradition is still felt or imposed more strongly in Asia than in Europe". Classrooms in China and some other Asian countries are different from those in western countries. Chinese teachers give lectures with little interaction and students do not like teachers to ask questions in class.

Looking at students' attitudes to working in groups, Hofstede (2001) and Littlewood (2001) found that people who come from Australia, Europe and North America perform most strongly with an individualist orientation, whereas people who come from Latin America and Asia perform most strongly with a collectivist orientation. The individualists value self-fulfillment and freedom of choice and claim their rights over the interests of the in-groups to which they belong (Li et al. 2008). On the other hand, the collectivists' identity, attitudes and actions are determined by their groups. They value the interests of the in-groups to which they belong to over their own individual interests. Fussell and Zhang (2007) believe that compared with individualists in western countries, eastern countries highly value communal well-



being and harmony. Similarly, Pan et al. (1994) indicate that American culture emphasises individualism, equality and freedom. Some scholars argue that western students prefer working alone, whereas Asian students like working together. For example, Hofstede (2001) suggests “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 to work together.”

In relation to language and communication, both students and teachers are aware of the inherent difficulties, and agree that many international students require English language support during their study (Chalmers and Volet 1997; Eisenclas and Trevaskes 2003). Tiong and Yong (2004) state that Asian international students become silent in group discussion and in the classroom because of their 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).

3.3 Contributions of this study to the literature

Although there is growing recognition of the need for research in the cross-cultural education domain, there remains a lack of research on which to draw to inform improved teaching and learning practices in higher education. A broad literature on cross-cultural education research has been found; however, it focuses primarily on issues of language and communication, specific courses, satisfactory analysis, difference between diverse student groups in learning methods and styles, and high school level study (Asmar, 1999; Watkins, 2000; Wei, 2007). There is essentially no literature on how deeper culturally specific assumptions and or situational variables may impact upon the teaching/learning relationship in higher education. Very little study has explored the implications of cultural background on teaching and learning itself.

There is therefore an urgent need to explore current new cross-cultural teaching and learning situations and to develop more suitable approaches to help improve the learning practices of Asian students in IT and business higher education in Australia.

This project identifies the influence of the trend of increasing numbers of cross-cultural students on teaching and learning approaches in the Australian educational environment through uncovering the differences and difficulties of Asian students who are studying in Australian universities. It proposes better understanding of Asian students' cultural backgrounds, their previous learning approaches and their perspectives on Australian culture and educational mode. It shows the differences between students of Asian background and local students in learning methodology and behaviour. It particularly develops a set of guidelines to help international students who come from different cultural backgrounds to overcome the difficulties of cross-cultural study. At the same time, it brings new ideas to lecturers who teach students from different cultural background about how to improve the quality of cross-cultural teaching in their courses. It also develops related strategies by recognising the factors which influence teaching and learning in a cross-cultural environment, to enhance the quality of teaching and learning in Australian universities.



4 Survey Data Analysis

This section presents data analysis results from the student survey in five universities. We first conduct frequency analysis in Section 4.1, followed by correlation analysis in Section 4.2. Finally, open question data analysis is presented in Section 4.3.

4.1 Frequency analysis for survey data (1026 students)

Questionnaire Section II. Teaching contents and textbooks

Question II.1 Which of the following best describes the textbooks you are using (and have used) in your study?

Table 1 The importance of textbooks (Question II.1)

			Student category		Total
			Australian	International	
Textbooks are	more important than lectures	Count	38	53	91
		Percentage	9.8%	8.3%	8.9%
	very effective in helping me understand lectures	Count	181	369	550
		Percentage	46.9%	57.7%	53.7%
	just a reference	Count	147	191	338
		Percentage	38.1%	29.9%	33.0%
	other	Count	20	26	46
		Percentage	5.2%	4.1%	4.5%
Total		Count	386	639	1025
		Percentage	100.0%	100.0%	100.0%

Table 1 shows that more than half the students (53.7%) believe that textbooks are very effective in helping them understand lectures while one third (33%) think textbooks are just references. Only 8.9% students rely more on textbooks than on their lectures. The same pattern is observed in both cohorts of international and Australian students, but less international students taking textbooks as a reference than local students

Question II.2 In what proportion of current and past subjects studied do you use a textbook?

Table 2 Textbooks usage ratio (Question II.2)

			Student category		Total
			Australian	International	Australia
Textbooks usage ratio	90-100%	Count	129	125	254
		Percentage	33.5%	19.5%	24.8%
	70-90%	Count	111	196	307
		Percentage	28.8%	30.6%	30.0%
	50-70%	Count	83	203	286
		Percentage	21.6%	31.7%	27.9%
	< 50 %	Count	62	116	178
		Percentage	16.1%	18.1%	17.4%
Total		Count	385	640	1025
		Percentage	100.0%	100.0%	100.0%



Table 2 shows that the majority of students (82.6%) use textbooks in no fewer than 50% of their subjects. 30% of students use textbooks for 70-90%, 27.9% of students use textbooks for 50-70% and 24.8% of students use textbooks for 90-100%. Only 17.4% students use textbooks less than 50%. A similar distribution pattern can be seen from Table 2. However, we found that more than one third (33.5%) of local students use textbooks in more than 90% of their subjects compared with 19.5% of international students.

Question II.3. If you chose D in question 2, what is the main reason?

Table 3 (Question II.3) Main reasons for choosing D in II.2

			Student category		Total
			Australian	International	Australia
Main reasons for choosing D in II.2	high price	Count	24	47	71
		Percentage	28.2%	31.5%	30.3%
	not very useful or not necessary	Count	39	50	89
		Percentage	45.9%	33.6%	38.0%
	I have other reference books	Count	5	16	21
		Percentage	5.9%	10.7%	9.0%
	other	Count	17	36	53
		Percentage	20.0%	24.2%	22.6%
Total		Count	85	149	234
		Percentage	100.0%	100.0%	100.0%

Table 3 shows that of students who do not often use textbooks, 45.9% local students believe that textbooks are not very necessary, while 33.6% of international students (33.6%) also think so. High price is another reason for low textbook usage rate by both cohorts.

Question II.4. What difficulties do you have reading your textbooks?

Table 4 (Question II.4) Difficulties when reading textbooks

			Student category		Total
			Australian	International	Australia
Difficulties when reading textbooks	none	Count	317	283	600
		Percentage	83.4%	44.8%	59.3%
	I am a slow reader due to English problems	Count	8	216	224
		Percentage	2.1%	34.2%	22.1%
	slow reader due to other problems	Count	17	29	46
		Percentage	4.5%	4.6%	4.5%
	can't understand contents	Count	4	71	75
		Percentage	1.1%	11.2%	7.4%
	other	Count	34	33	67
		Percentage	8.9%	5.2%	6.6%



Total	Count	380	632	1012
	Percentage	100.0%	100.0%	100.0%

Table 4 shows that more than one-third (34.2%) of international students have some difficulties in reading textbooks due to English problems and 11.2% cannot understand the contents of textbooks.

Question II.5. On average, what do you read in your textbooks?

Table 5 (Question II.5) Reading textbooks

			Student category		Total
			Australian	International	Australia
What do you read in textbooks	all contents	Count	96	201	297
		Percentage	24.9%	31.5%	29.0%
	only the suggested readings	Count	208	375	583
		Percentage	54.0%	58.7%	56.9%
	very little	Count	67	45	112
		Percentage	17.4%	7.0%	10.9%
	others	Count	14	18	32
		Percentage	3.6%	2.8%	3.1%
Total		Count	385	639	1024
		Percentage	100.0%	100.0%	100.0%

Table 5 shows that more than half the students (56.9%) including both local (54.0%) and international (57.7%) students only read the suggested part of textbooks. More international students (31.5% compared with 24.9% of Australian students) read all contents of textbook content. The percentage of local students (17.4%) who pay little attention to textbooks is higher than that of the international students (7%).

Question II.6. Describe the characteristics of the textbooks you prefer:

Table 6 (Question II.6.A) Emphasis on theories

			Student category		Total
			Australian	International	Australia
Textbook should emphasise theories	1 strongly disagree	Count	12	35	47
		Percentage	3.1%	5.5%	4.6%
	2	Count	21	77	98
		Percentage	5.5%	12.1%	9.6%
	3	Count	118	209	327
		Percentage	30.8%	32.8%	32.1%
	4	Count	169	230	399
		Percentage	44.1%	36.1%	39.1%
	5 strongly agree	Count	63	86	149
		Percentage	16.4%	13.5%	14.6%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

It is observed from Table 6 that 60.5% (44.1% +16.4%) Australian students and



49.6% (36.1%+13.5%) of international students agree that textbooks should emphasise theories.

Table 7 (Question II.6.B) Introducing novel ideas

			Student category		Total
			Australian	International	Australia
Textbook should introduce novel ideas	1 strongly disagree	Count	14	16	30
		Percentage	3.7%	2.5%	2.9%
	2	Count	45	90	135
		Percentage	11.8%	14.2%	13.3%
	3	Count	166	261	427
		Percentage	43.5%	41.1%	42.0%
	4	Count	135	212	347
		Percentage	35.3%	33.4%	34.1%
	5 strongly agree	Count	22	56	78
		Percentage	5.8%	8.8%	7.7%
Total		Count	382	635	1017
		Percentage	100.0%	100.0%	100.0%

It can be seen from Table 7 that 41.1% of local and 42.2% of international students believe that textbooks should introduce novel idea.

Table 8 (Question II.6.C) Encouraging students to think

			Student category		Total
			Australian	International	Australia
Textbook should encourage students to think	1 strongly disagree	Count	14	11	25
		Percentage	3.7%	1.7%	2.5%
	2	Count	55	80	135
		Percentage	14.5%	12.7%	13.3%
	3	Count	133	225	358
		Percentage	35.0%	35.6%	35.4%
	4	Count	136	207	343
		Percentage	35.8%	32.8%	33.9%
	5 strongly agree	Count	42	109	151
		Percentage	11.1%	17.2%	14.9%
Total		Count	380	632	1012
		Percentage	100.0%	100.0%	100.0%

Table 8 indicates that 46.9% local and 50% international students believe that textbooks should encourage students to think.

Table 9 (Question II.6.D) Providing examples to help with exercises and assignments

			Student category		Total
			Australian	International	Australia
Textbook should give many examples to help with exercises and assignments	1 strongly disagree	Count	9	15	24
		Percentage	2.4%	2.4%	2.4%



	2	Count	12	30	42
		Percentage	3.1%	4.7%	4.1%
	3	Count	49	112	161
		Percentage	12.8%	17.6%	15.8%
	4	Count	119	183	302
		Percentage	31.2%	28.7%	29.6%
	5 strongly agree	Count	193	297	490
		Percentage	50.5%	46.6%	48.1%
Total		Count	382	637	1019
		Percentage	100.0%	100.0%	100.0%

Table 9 shows that the majority of local and international students (81.7% and 75.3% respectively) agree that textbooks should give many examples to help with exercises and assignments.

Table 10 (Question II.6.E) Presenting up-to-date knowledge and techniques

			Student category		Total
			Australian	International	Australia
Textbook should provide up-to-date knowledge and techniques	1 strongly disagree	Count	8	13	21
		Percentage	2.1%	2.0%	2.1%
	2	Count	17	38	55
		Percentage	4.4%	6.0%	5.4%
	3	Count	65	139	204
		Percentage	17.0%	21.8%	20.0%
	4	Count	144	205	349
		Percentage	37.6%	32.2%	34.2%
	5 strongly agree	Count	149	242	391
		Percentage	38.9%	38.0%	38.3%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

Table 10 shows that the majority of local and international students (76.6% and 70.2% respectively) agree that textbooks should provide up-to-date knowledge and techniques.

Table 11 (Question II.6.F) Textbook should provide many case studies to help understand

			Student category		Total
			Australian	International	Australia
Textbook should provide many case studies to help understand	1 strongly disagree	Count	5	13	18
		Percentage	1.3%	2.0%	1.8%
	2	Count	26	51	77
		Percentage	6.8%	8.0%	7.5%
	3	Count	89	127	216



		Percentage	23.2%	19.9%	21.2%
	4	Count	141	235	376
		Percentage	36.8%	36.9%	36.9%
	5 strongly agree	Count	122	211	333
		Percentage	31.9%	33.1%	32.6%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

As shown in Table 11, the view that textbooks should provide many case studies to help understand, is supported by the majority of students (78.5% local and 70% international students).

Table 12(Question II.6.G) Combining theory with practice and applications

			Student category		Total
			Australian	International	Australia
Textbook should combine theory with practice and applications	1 strongly disagree	Count	3	15	18
		Percentage	.8%	2.4%	1.8%
	2	Count	18	37	55
		Percentage	4.7%	5.8%	5.4%
	3	Count	59	129	188
		Percentage	15.4%	20.3%	18.4%
	4	Count	157	225	382
		Percentage	41.0%	35.3%	37.5%
	5 strongly agree	Count	146	231	377
		Percentage	38.1%	36.3%	37.0%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

Table 12 shows that 79.1% local and 71.6% international students agree that textbooks should combine theory with practice and applications.

Question II.7. Do you use any reference books written in other languages?

Table 13 (Question II.7) Using reference books written in other languages

			Student category		Total
			Australian	International	Australia
Do you use any reference books written in other languages	no	Count	372	531	903
		Percentage	97.4%	83.5%	88.7%
	yes	Count	10	105	115
		Percentage	2.6%	16.5%	11.3%
Total		Count	382	636	1018
		Percentage	100.0%	100.0%	100.0%



Table 13 shows that nearly all local students (97.4%) and international students (83.5%) never use a non-English reference book, while some international students (16.5%) use other language reference books.

Question II.8. Are you satisfied with the textbooks you have used?

Table 14 (Question II.8) Satisfaction with the textbook

			Student category		Total
			Australian	International	Australia
Are you satisfied with the textbook	1 not at all satisfied	Count	8	13	21
		Percentage	2.1%	2.0%	2.1%
	2	Count	30	59	89
		Percentage	7.8%	9.3%	8.7%
	3	Count	159	276	435
		Percentage	41.3%	43.3%	42.6%
	4	Count	171	243	414
		Percentage	44.4%	38.1%	40.5%
	5 very satisfied	Count	17	46	63
		Percentage	4.4%	7.2%	6.2%
Total		Count	385	637	1022
		Percentage	100.0%	100.0%	100.0%

Table 14 shows that 45.3% of international and 48.8% of local students are satisfied with their textbooks.

Question II.9. How often do you read your lecture notes?

Table 15 (Question II.9) Frequency of reading lecture notes

			Student category		Total
			Australian	International	Australia
How often do you read your lecture notes	all the time	Count	183	283	466
		Percentage	47.4%	44.2%	45.4%
	only important ones	Count	169	320	489
		Percentage	43.8%	50.0%	47.7%
	don't read	Count	9	18	27
		Percentage	2.3%	2.8%	2.6%
	other	Count	25	19	44
		Percentage	6.5%	3.0%	4.3%
Total		Count	386	640	1026
		Percentage	100.0%	100.0%	100.0%

Table 15 shows that more than 90% of students like to read lecture notes rather than textbooks. Nearly half of them read lecture notes all the time and another half only read the important parts of lecture notes. Such preferences are true for both cohorts.



Question II.10. Do you use other reference materials (books or other materials such as those from the Internet)?

Table 16 (Question II.10) Using other reference materials

			Student category		Total
			Australian	International	Australia
Do you use other reference materials	always	Count	111	204	315
		Percentage	28.8%	31.9%	30.8%
	only those suggested	Count	82	167	249
		Percentage	21.3%	26.1%	24.3%
	only when I have problems	Count	180	249	429
		Percentage	46.8%	39.0%	41.9%
	other	Count	12	19	31
		Percentage	3.1%	3.0%	3.0%
Total		Count	385	639	1024
		Percentage	100.0%	100.0%	100.0%

Table 16 shows that nearly one third of students (30.8%) always use other reference materials and more than one third of students (41.9%) only use them when they have problems. The observed pattern is true of both cohorts, but international students are little higher than local students.

Questionnaire Section III. Teaching and learning methods

Question III.1. Do you feel that the teaching methods in your current subjects are suitable?

Table 17 (Question III.1) Suitability of teaching methods in current subjects

			Student category		Total
			Australian	International	Australia
Do you feel that the teaching methods in your current subjects are suitable	very suitable	Count	213	264	477
		Percentage	55.5%	41.3%	46.6%
	not at the beginning	Count	88	261	349
		Percentage	22.9%	40.8%	34.1%
	not suitable	Count	40	62	102
		Percentage	10.4%	9.7%	10.0%
	other	Count	43	52	95
		Percentage	11.2%	8.1%	9.3%
Total		Count	384	639	1023
		Percentage	100.0%	100.0%	100.0%

Table 17 points out that more than half of local students (55.5%) feel the teaching



methods are good, while less than half of international students (41.3%) think they are suitable. Many international students (40.8%) don't feel good at the beginning.

Question III.2. If you selected C in Question 1, please give your reasons:

Table 18 (Question III.2) Reasons for selecting C in Question 1

			Student category		Total
			Australian	International	Australia
If you selected C in Question 1, please give your reasons	different	Count	6	25	31
		Percentage	10.5%	27.8%	21.1%
	difficult	Count	6	17	23
		Percentage	10.5%	18.9%	15.6%
	don't like	Count	25	32	57
		Percentage	43.9%	35.6%	38.8%
	other	Count	20	16	36
		Percentage	35.1%	17.8%	24.5%
Total		Count	57	90	147
		Percentage	100.0%	100.0%	100.0%

Table 18 suggests that the reason for local students feel the teaching method is not suitable is they just don't like it (43.9%) while the reason for international students is that they feel it is different from their previous teaching methods (27.8%) and they don't like it (35.6%).

Question III.3. Preferred teaching methods?

Table 19 (Question III.3.A) Preferred face-to-face lectures and taking notes

			Student category		Total
			Australian	International	Australia
Preferred face-to-face lectures and students taking notes	1 strongly disagree	Count	8	25	33
		Percentage	2.1%	3.9%	3.2%
	2	Count	33	58	91
		Percentage	8.7%	9.1%	8.9%
	3	Count	85	145	230
		Percentage	22.3%	22.7%	22.6%
	4	Count	158	246	404
		Percentage	41.5%	38.6%	39.6%
	5 strongly agree	Count	97	164	261
		Percentage	25.5%	25.7%	25.6%
Total		Count	381	638	1019
		Percentage	100.0%	100.0%	100.0%

Table 19 shows that more local students (41.5%) like face-to-face lectures and taking notes than international students (38.6%).



Table 20 (Question III.3.B) Preferred case studies, class discussions and interaction

			Student category		Total
			Australian	International	Australia
Preferred case studies, class discussions and interaction	1 strongly disagree	Count	10	11	21
		Percentage	2.6%	1.7%	2.1%
	2	Count	27	47	74
		Percentage	7.0%	7.4%	7.3%
	3	Count	90	161	251
		Percentage	23.5%	25.3%	24.6%
	4	Count	146	241	387
		Percentage	38.1%	37.8%	37.9%
	5 strongly agree	Count	110	177	287
		Percentage	28.7%	27.8%	28.1%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

Table 20 shows that case studies, class discussions and interactive teaching methods are popular among local and international students (66.8% and 65.6% agreement rate respectively)

Table 21 (Question III.3.C) Preferred self-learning based with lecturer supervision

			Student category		Total
			Australian	International	Australia
Preferred self-learning based with lecturer supervision	1 strongly disagree	Count	24	58	82
		Percentage	6.3%	9.1%	8.1%
	2	Count	79	121	200
		Percentage	20.8%	19.0%	19.7%
	3	Count	122	220	342
		Percentage	32.1%	34.5%	33.6%
	4	Count	119	175	294
		Percentage	31.3%	27.5%	28.9%
	5 strongly agree	Count	36	63	99
		Percentage	9.5%	9.9%	9.7%
Total		Count	380	637	1017
		Percentage	100.0%	100.0%	100.0%

Table 21 shows that both the majority of local and international students (59.2% and 63.6%) are not very keen on self-learning with lecturer supervision.

Table 22 (Question III.3.D) Preferred fewer lectures and more labs and tutorials

		Student category	Total
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			Australian	International	Australia
Preferred fewer lectures and more labs and tutorials	1 strongly disagree	Count	11	35	46
		Percentage	2.9%	5.5%	4.5%
	2	Count	58	83	141
		Percentage	15.1%	13.1%	13.8%
	3	Count	124	185	309
		Percentage	32.4%	29.1%	30.3%
	4	Count	101	191	292
		Percentage	26.4%	30.0%	28.7%
	5 strongly agree	Count	89	142	231
		Percentage	23.2%	22.3%	22.7%
Total		Count	383	636	1019
		Percentage	100.0%	100.0%	100.0%

Table 22 indicates that approximately half the students (51.4%) like the idea of having fewer lectures and more labs and tutorials (49.6% for local students and 52.3% for international students).

Question III.4. How can this help in learning and future development: Each concept has one definition only so there is no confusion

Table 23 (Question III.4.A) Preferred each concept has one definition only so there is no confusion

			Student category		Total
			Australian	International	Australia
Preferred each concept has one definition only so there is no confusion	1 strongly disagree	Count	18	37	55
		Percentage	4.7%	5.8%	5.4%
	2	Count	56	82	138
		Percentage	14.5%	12.9%	13.5%
	3	Count	129	241	370
		Percentage	33.5%	38.0%	36.3%
	4	Count	114	188	302
		Percentage	29.6%	29.7%	29.6%
	5 strongly agree	Count	68	86	154
		Percentage	17.7%	13.6%	15.1%
Total		Count	385	634	1019
		Percentage	100.0%	100.0%	100.0%

Table 23 shows that more than 47.3% of local students and 43.3% of international students like to have one definition for each concept.



Table 24 (Question III.4.B) Preferred fewer class questions from students so lecturers have more time to talk

			Student category		Total
			Australian	International	Australia
Preferred fewer class questions from students so lecturers have more time to talk	1 strongly disagree	Count	56	55	111
		Percentage	14.5%	8.6%	10.9%
	2	Count	134	169	303
		Percentage	34.8%	26.5%	29.6%
	3	Count	123	245	368
		Percentage	31.9%	38.4%	36.0%
	4	Count	46	131	177
		Percentage	11.9%	20.5%	17.3%
	5 strongly agree	Count	26	38	64
		Percentage	6.8%	6.0%	6.3%
Total		Count	385	638	1023
		Percentage	100.0%	100.0%	100.0%

Table 24 shows that 18.7% local students and 26.5% of international students would not like more questions from students to lecturers in class.

Table 25 (Question III.4.C) Preferred fewer group assignments and more individual assignments

			Student category		Total
			Australian	International	Australia
Preferred fewer group assignments and more individual assignments	1 strongly disagree	Count	17	42	59
		Percentage	4.4%	6.6%	5.8%
	2	Count	52	139	191
		Percentage	13.5%	21.8%	18.7%
	3	Count	115	217	332
		Percentage	29.9%	34.1%	32.5%
	4	Count	96	149	245
		Percentage	24.9%	23.4%	24.0%
	5 strongly agree	Count	105	90	195
		Percentage	27.3%	14.1%	19.1%
Total		Count	385	637	1022
		Percentage	100.0%	100.0%	100.0%

Table 25 shows that 54.2% local students dislike many group assignments while 37.5% international students agree with this.



Table 26 (Question III.4.D) Preferred fewer student presentations and more lectures

			Student category		Total
			Australian	International	Australia
Preferred fewer student presentations and more lectures	1 strongly disagree	Count	16	34	50
		Percentage	4.2%	5.3%	4.9%
	2	Count	59	109	168
		Percentage	15.3%	17.1%	16.4%
	3	Count	139	234	373
		Percentage	36.1%	36.7%	36.5%
	4	Count	98	180	278
		Percentage	25.5%	28.3%	27.2%
	5 strongly agree	Count	73	80	153
		Percentage	19.0%	12.6%	15.0%
Total		Count	385	637	1022
		Percentage	100.0%	100.0%	100.0%

Table 26 shows that 44.5% of local students and 59.1% of international students prefer fewer student presentations and more lectures..

Table 27 (Question III.4.E) Preferred lecturers to arrange assignment groups rather than students

			Student category		Total
			Australian	International	Australia
Preferred lecturers to arrange assignment groups rather than students	1 strongly disagree	Count	106	105	211
		Percentage	27.7%	16.7%	20.9%
	2	Count	77	119	196
		Percentage	20.2%	19.0%	19.4%
	3	Count	90	189	279
		Percentage	23.6%	30.1%	27.7%
	4	Count	65	142	207
		Percentage	17.0%	22.6%	20.5%
	5 strongly agree	Count	44	72	116
		Percentage	11.5%	11.5%	11.5%
Total		Count	382	627	1009
		Percentage	100.0%	100.0%	100.0%

Table 27 shows that 71.5% of Australian students dislike the idea of lecturers arranging assignment groups while 34.1% of international students like this method.

Table 28 (Question III.4.F) Preferred working in groups with local students



			Student category		Total
			Australian	International	Australia
Preferred working in groups with local students	1 strongly disagree	Count	17	29	46
		Percentage	4.4%	4.6%	4.5%
	2	Count	23	54	77
		Percentage	6.0%	8.5%	7.6%
	3	Count	141	209	350
		Percentage	36.7%	32.9%	34.3%
	4	Count	107	198	305
		Percentage	27.9%	31.2%	29.9%
	5 strongly agree	Count	96	145	241
		Percentage	25.0%	22.8%	23.7%
Total		Count	384	635	1019
		Percentage	100.0%	100.0%	100.0%

Table 28 tells that more than half of both local and international students (52.9% and 54% respectively) like to work in groups with local students.

Table 29 (Question III.4.G) Preferred working in groups with international students

			Student category		Total
			Australian	International	Australia
Preferred working in groups with international students	1 strongly disagree	Count	97	31	128
		Percentage	25.3%	4.9%	12.6%
	2	Count	65	48	113
		Percentage	17.0%	7.6%	11.1%
	3	Count	155	259	414
		Percentage	40.5%	40.8%	40.7%
	4	Count	47	187	234
		Percentage	12.3%	29.4%	23.0%
	5 strongly agree	Count	19	110	129
		Percentage	5.0%	17.3%	12.7%
Total		Count	383	635	1018
		Percentage	100.0%	100.0%	100.0%

Table 29 suggests that only 17.3% of local students would like to work with international students compared with 46.7% of international students who are more likely to work with other international students.

Question III.5. What are the main differences between teaching methods here and teaching methods in your previous education?

Table 30 (Question III.5) Main differences between teaching methods here and in your previous education



			Student category		Total
			Australian	International	Australia
Main differences between teaching methods here and in your previous education	more interaction	Count	35	170	205
		Percentage	9.5%	27.0%	20.5%
	fewer hours of face to face teaching	Count	162	112	274
		Percentage	44.0%	17.8%	27.5%
	more self study	Count	122	247	369
		Percentage	33.2%	39.2%	37.0%
	more group assignments	Count	36	69	105
		Percentage	9.8%	11.0%	10.5%
	other	Count	13	32	45
		Percentage	3.5%	5.1%	4.5%
Total		Count	368	630	998
		Percentage	100.0%	100.0%	100.0%

Table 30 shows that 44% of local students believe that in university they have less time of face-to-face teaching time, while only 17.8% of international students have the same feeling. 27% of international students feel there is more interactions while only 9.5% of local students think so.

Question III.6. Do you like lecturers to ask questions in class?

Table 31 (Question III.6) Attitude towards being asked questions in class by lecturers

			Student category		Total
			Australian	International	Australia
Do you like lecturers to ask questions in class	yes	Count	55	108	163
		Percentage	14.3%	16.9%	15.9%
	yes but not too many	Count	93	180	273
		Percentage	24.2%	28.2%	26.7%
	yes but with answer	Count	173	271	444
		Percentage	44.9%	42.5%	43.4%
	no	Count	43	61	104
		Percentage	11.2%	9.6%	10.2%
	don't mind	Count	21	18	39
		Percentage	5.5%	2.8%	3.8%
Total		Count	385	638	1023
		Percentage	100.0%	100.0%	100.0%

Table 31 shows that most of the students (83.4% of local students and 87.6% of



internal students) do not mind being asked questions in class. 44.9% of local students and 42.5% international students like the lecturers to ask questions with clear answers, while 24.2% of local and 28.2% of international students hope lecturers do not ask too many questions in the class.

Question III. 7. What are you most concerned about when evaluating a subject?

Table 32 (Question III.7) Most concerned about when evaluating a subject

			Student category		Total
			Australian	International	Australia
What are you most concerned about when evaluating a subject	introduce concepts clearly	Count	132	221	353
		Percentage	34.5%	34.6%	34.6%
	assessed well	Count	83	105	188
		Percentage	21.7%	16.5%	18.4%
	applying jobs	Count	86	214	300
		Percentage	22.5%	33.5%	29.4%
	easy to understand	Count	55	72	127
		Percentage	14.4%	11.3%	12.4%
	easy to pass	Count	27	26	53
		Percentage	7.0%	4.1%	5.2%
Total		Count	383	638	1021
		Percentage	100.0%	100.0%	100.0%

Table 32 shows that more than one third of both Australian and international students agree on introducing concepts in classes clearly. More local students are concerned with assessments (21.7% vs. 16.5%), while more international students concern how knowledge learnt can help in applying for jobs (33.5% vs. 22.5%)

Question III. 8. In general, do you prefer

Table 33 (Question III.8) General preference for teaching approach

			Student category		Total
			Australian	International	Australia
In general, do you prefer	teacher centred	Count	205	314	519
		Percentage	53.4%	49.3%	50.8%
	student centred	Count	135	227	362
		Percentage	35.2%	35.6%	35.5%
	text-book centred	Count	33	56	89
		Percentage	8.6%	8.8%	8.7%
	other	Count	11	40	51
		Percentage	2.9%	6.3%	5.0%
Total		Count	384	637	1021
		Percentage	100.0%	100.0%	100.0%



Table 33 shows that about half of local students (53.4%) and international students (49.3%) prefer a teacher centred approach, and about one third of each of these two cohorts prefer student a centred method (35.2% and 35.6% respectively).

Question III. 9. In general, how satisfied are you with the teaching methods in your current subjects?

Table 34 (Question III.9) How satisfied are you with the teaching methods in your current subjects

			Student category		Total
			Australian	International	Australia
How satisfied are you with the teaching methods in your current subjects	1 not at all satisfied	Count	7	7	14
		Percentage	1.8%	1.1%	1.4%
	2	Count	32	39	71
		Percentage	8.4%	6.2%	7.0%
	3	Count	127	237	364
		Percentage	33.2%	37.5%	35.9%
	4	Count	197	305	502
		Percentage	51.4%	48.3%	49.5%
	5 very satisfied	Count	20	44	64
		Percentage	5.2%	7.0%	6.3%
Total		Count	383	632	1015
		Percentage	100.0%	100.0%	100.0%

Table 34 suggests that the majority of both international and local students are satisfied with the teaching methods (56.6% and 55.3% respectively).

Questionnaire Section IV. Education management systems

Question IV.1. Do you have any experience with credit-point systems in your previous education?

Table 35 (Question IV.1) Experience with credit-point systems in your previous education

			Student category		Total
			Australian	International	Australia
Do you have any experience with credit-point systems in your previous education	yes	Count	57	242	299
		Percentage	15.0%	38.1%	29.4%
	some experience	Count	56	121	177
		Percentage	14.7%	19.1%	17.4%
	very little	Count	61	91	152
		Percentage	16.0%	14.3%	15.0%
	not at all	Count	207	181	388
		Percentage	54.3%	28.5%	38.2%
Total		Count	381	635	1016
		Percentage	100.0%	100.0%	100.0%



Table 35 shows that most of the local students (70.3%) have no experience or very little previous experience with credit-point systems, while 57.2% of international students have experience or have previous experience of credit-point systems.

Question IV.2. Do you have any experience in selecting subjects and sub-majors by yourself?

Table 36 (Question IV.2) Experience in selecting subjects and sub-majors yourself

			Student category		Total
			Australian	International	Australia
Do you have any experience of selecting subjects and sub-majors by yourself	yes	Count	137	284	421
		Percentage	35.8%	44.6%	41.3%
	some experience	Count	103	146	249
		Percentage	26.9%	22.9%	24.4%
	very little	Count	79	114	193
		Percentage	20.6%	17.9%	18.9%
	not at all	Count	64	93	157
		Percentage	16.7%	14.6%	15.4%
Total		Count	383	637	1020
		Percentage	100.0%	100.0%	100.0%

Table 36 suggests that most local students (70.8%) and international students (67.5%) have experience of selecting subjects and sub-majors by themselves.

Question IV.3. Would you like to be able to take more elective subjects?

Table 37 (Question IV.3) Being able to take more elective subjects

			Student category		Total
			Australian	International	Australia
Would you like to be able to take more elective subjects	yes	Count	227	443	670
		Percentage	59.3%	69.7%	65.8%
	no	Count	44	83	127
		Percentage	11.5%	13.1%	12.5%
	no preference	Count	112	110	222
		Percentage	29.2%	17.3%	21.8%
Total		Count	383	636	1019
		Percentage	100.0%	100.0%	100.0%

Table 37 shows that more than half of both cohorts would like to have more options for elective subjects, the majority being international students (69.7% international vs. 59.3% local).

Question IV.4. Do you feel that your department/university has provided you with sufficient guidance and help on studying in the Australian university education system?



Table 38 (Question IV.4) Sufficient help on the education system provided by your university

			Student category		Total
			Australian	International	Australia
Do you feel that your university has provided sufficient help on the education system	yes	Count	202	277	479
		Percentage	52.9%	43.6%	47.1%
	not enough	Count	124	282	406
		Percentage	32.5%	44.3%	39.9%
	got help from senior	Count	29	62	91
		Percentage	7.6%	9.7%	8.9%
	no need help	Count	27	15	42
		Percentage	7.1%	2.4%	4.1%
Total		Count	382	636	1018
		Percentage	100.0%	100.0%	100.0%

Table 38 shows that more local students than international believe that universities provide enough help on education systems (52.9% vs. 43.6%, respectively). However, more than one third of students (39.9% on average), in particular 44.3% of international students, think that it is insufficient.

Question IV.5. Do you have any difficulties in selecting subjects and sub-majors by yourself?

Table 39 (Question IV.5) Difficulties in selecting subjects and sub-majors by yourself

			Student category		Total
			Australian	International	Australia
Do you have any difficulties in selecting subjects and sub-majors by yourself	1 very difficult	Count	14	31	45
		Percentage	3.7%	4.9%	4.4%
	2	Count	43	86	129
		Percentage	11.3%	13.6%	12.7%
	3	Count	119	228	347
		Percentage	31.2%	36.0%	34.2%
	4	Count	108	171	279
		Percentage	28.3%	27.0%	27.5%
	5 no difficult at all	Count	97	118	215
		Percentage	25.5%	18.6%	21.2%
Total		Count	381	634	1015
		Percentage	100.0%	100.0%	100.0%

Table 39 shows that 54.5% of international students and 46.2% of local students experience difficulties in selecting subjects and sub-majors by themselves.



Question IV.6. Do you prefer to study

Table 40 (Question IV.6) Preferred place to study

			Student category		Total
			Australian	International	Australia
Where do you prefer to study	at home	Count	174	148	322
		Percentage	45.4%	23.3%	31.6%
	at university with friends	Count	46	108	154
		Percentage	12.0%	17.0%	15.1%
	at university with students	Count	66	217	283
		Percentage	17.2%	34.2%	27.8%
	no preference	Count	97	162	259
		Percentage	25.3%	25.5%	25.4%
Total		Count	383	635	1018
		Percentage	100.0%	100.0%	100.0%

Table 40 shows that many local students like to study at home (45.5% vs. 23.3% of international students), while international students prefer to study at university with other students (34.2% vs. 17.2% of local students).

Questionnaire Section V. Language

Question V.1. Due to the cultural and language differences, sometimes it is not easy to communicate with those students from different cultural backgrounds. What do you think are the main difficulties in communicating?

Table 41 (Question V.1) The main difficulties in cross-cultural communication

			Student category		Total
			Australian	International	Australia
What are the main difficulties in cross-cultural communication	not confident	Count	23	214	237
		Percentage	6.6%	34.9%	24.7%
	lack of interest	Count	131	299	430
		Percentage	37.9%	48.7%	44.8%
	only like own language	Count	89	20	109
		Percentage	25.7%	3.3%	11.4%
	other	Count	103	81	184
		Percentage	29.8%	13.2%	19.2%
Total		Count	346	614	960
		Percentage	100.0%	100.0%	100.0%

Table 41 shows that on average nearly half of students (44.8%) lack interest in communicating with students from the other cohort. International students are less confident (34.9% vs. 6.6%) when they want to communicate with others.

Question V.2. Do you have any English language related difficulties in



understanding lectures?

Table 42 (Question V.2) English language-related difficulties in understanding lectures

			Student category		Total
			Australian	International	Australia
Do you have any English language-related difficulties in understanding lectures	can't understand	Count	12	34	46
		Percentage	3.2%	5.3%	4.6%
	hard to take notes	Count	36	257	293
		Percentage	9.7%	40.4%	29.0%
	only if read the lecture notes	Count	33	95	128
		Percentage	8.8%	14.9%	12.7%
	no problem	Count	292	250	542
		Percentage	78.3%	39.3%	53.7%
Total		Count	373	636	1009
		Percentage	100.0%	100.0%	100.0%

Table 42 shows that most local students (78.3%) have no difficulties in understanding lectures. Only 39.3% of international students feel no problem while there are 40.4% of international students feel hard to take notes.

Question V.3. Do you have any English language-related difficulties when completing your homework?

Table 43 (Question V.3) English language-related difficulties when completing your homework

			Student category		Total
			Australia n	International	Australia
Do you have any English language-related difficulties when completing your homework	need help of others	Count	10	119	129
		Percentage	2.7%	18.7%	12.8%
	need help from dictionaries	Count	15	191	206
		Percentage	4.0%	30.1%	20.4%
	translate to first language	Count	7	74	81
		Percentage	1.9%	11.7%	8.0%
	no problem	Count	341	251	592



		Percentage	91.4%	39.5%	58.7%
Total		Count	373	635	1008
		Percentage	100.0%	100.0%	100.0%

Table 43 shows that local students (91.4%) have no difficult in doing homework, while nearly one third of international students (30.1%) need the help of dictionaries.

Question V.4. Are you confident about your English when participating in class discussions?

Table 44(Question V.4) Being confident about your English to participate in-class discussions

			Student category		Total
			Australian	International	Australia
Are you confident about your English when participating in class discussions	very confident	Count	323	192	515
		Percentage	86.8%	30.2%	51.1%
	not very but try to	Count	35	332	367
		Percentage	9.4%	52.2%	36.4%
	not confident	Count	11	96	107
		Percentage	3.0%	15.1%	10.6%
	other	Count	3	16	19
		Percentage	.8%	2.5%	1.9%
Total		Count	372	636	1008
		Percentage	100.0%	100.0%	100.0%

Table 44 shows that local students are more confident (86.8%) in class discussions compared with 30.2% of international students. More than half of international students (52.2%) feel not very confident but try to be confident in class discussions.

Question V.5. Do you have any English language-related difficulties in class presentations?

Table 45 (Question V.5) English language related difficulties in class presentations

			Student category		Total
			Australian	International	Australia
Do you have any English language-related difficulties in class presentations	help from others	Count	3	79	82
		Percentage	.8%	12.4%	8.2%
	need practice	Count	51	294	345
		Percentage	13.8%	46.2%	34.3%
	don't present in group	Count	14	85	99
		Percentage	3.8%	13.3%	9.8%



	confident	Count	301	179	480
		Percentage	81.6%	28.1%	47.7%
Total		Count	369	637	1006
		Percentage	100.0%	100.0%	100.0%

Table 45 shows that most local students (81.6%) and some of international students (28.1%) feel no difficulty in making class presentations. 46.2% of international students feel they need practice, which is a much higher percentage than local students (13.8%).

Questionnaire Section VI. Culture -based teaching & learning concepts

Question VI.1. What are you most concerned about when evaluating lecturers' performance?

Table 46 (Question VI.) Of most concern about when evaluating lecturers' performance

			Student category		Total
			Australian	International	Australia
What are you most concerned about when evaluating lecturers' performance	explain concepts clearly	Count	267	312	579
		Percentage	70.8%	49.2%	57.3%
	encourage students	Count	49	128	177
		Percentage	13.0%	20.2%	17.5%
	easy to take notes	Count	41	81	122
		Percentage	10.9%	12.8%	12.1%
	combine research results	Count	13	39	52
		Percentage	3.4%	6.2%	5.1%
	understanding different backgrounds	Count	6	74	80
		Percentage	1.6%	11.7%	7.9%
		Count	1	0	1
		Percentage	.3%	.0%	.1%
Total		Count	377	634	1011
		Percentage	100.0%	100.0%	100.0%

Table 46 shows that most local students (70.8%) are concerned whether lecturers can explain concepts clearly, while 40.9% of international students care about this. Two other common deciding factors for both cohorts are encouraging students and being easy to take notes. International students place more emphasis on lecturers' understanding of different backgrounds (11.7% vs. 1.6% of local students).

Question VI.2. Who do you think are good students?

Table 47 (Question VI.2) Views on good students

			Student category		Total
			Australian	International	Australia
Who do you	have good marks	Count	136	126	262



think are good students					
		Percentage	35.8%	19.9%	25.8%
	contributions to group	Count	40	71	111
		Percentage	10.5%	11.2%	10.9%
	good broad knowledge	Count	78	169	247
		Percentage	20.5%	26.7%	24.4%
	analytical and problem solving	Count	93	233	326
		Percentage	24.5%	36.8%	32.1%
	challenge lecturers	Count	15	16	31
		Percentage	3.9%	2.5%	3.1%
	other	Count	17	19	36
		Percentage	4.5%	3.0%	3.6%
		Count	1	0	1
		Percentage	.3%	.0%	.1%
Total		Count	380	634	1014
		Percentage	100.0%	100.0%	100.0%

Table 47 shows that more than one third (35.8%) of local students think a good student should have good marks while only 19.9 percent of international students think so. International students pay more attention to broad knowledge (26.7%) and analytical and problem solving capabilities (36.8%).

Question VI.3. Do you like to express your ideas and opinions in class?

Table 48 (Question VI.3) Expressing your ideas and opinions in class

			Student category		Total
			Australia n	International	Australi a
Do you like to express your ideas and opinions in class	very often	Count	98	124	222
		Percentage	26.1%	19.7%	22.1%
	only if asked	Count	163	312	475
		Percentage	43.5%	49.5%	47.3%
	no, prefer to listen	Count	100	171	271
		Percentage	26.7%	27.1%	27.0%
	others	Count	14	23	37
		Percentage	3.7%	3.7%	3.7%
Total		Count	375	630	1005
		Percentage	100.0%	100.0%	100.0%

Table 48 shows that more local students like to express their ideas in class than international students (26.1% vs. 19.7%) while more international students prefer to answer questions only if they are asked (49.5% vs. 43.5%).

Question VI.4. Do you care whether your opinions are the same as others? I



Table 49 (Question VI.4) Caring about whether your opinions are the same as others

			Student category		Total
			Australian	International	Australia
Do you care about whether your opinions are the same as others	care a lot	Count	25	110	135
		Percentage	6.6%	17.4%	13.3%
	care a little	Count	143	258	401
		Percentage	37.6%	40.8%	39.6%
	do not care	Count	183	237	420
		Percentage	48.2%	37.4%	41.5%
	only in the first semester	Count	29	28	57
		Percentage	7.6%	4.4%	5.6%
Total		Count	380	633	1013
		Percentage	100.0%	100.0%	100.0%

Table 49 shows that many local students do not care whether their opinions are the same as others compared with international students (48.2% vs. 37.4%), whereas 17.4% of international students care a lot about this compared with local (17.4% vs. 6.6%).

Question VI.5. Do you insist on your opinion when it conflicts with others'?

Table 50 (Question VI.5) Insisting on your opinion when it conflicts with others'

			Student category		Total
			Australian	International	Australia
Do you insist on your opinion when it conflicts with others'	always	Count	61	110	171
		Percentage	16.3%	17.5%	17.1%
	not often	Count	209	346	555
		Percentage	55.7%	55.2%	55.4%
	never	Count	60	88	148
		Percentage	16.0%	14.0%	14.8%
	only if conflict is with other students	Count	32	52	84
		Percentage	8.5%	8.3%	8.4%
	only if conflict is with teachers	Count	13	31	44
		Percentage	3.5%	4.9%	4.4%
Total		Count	375	627	1002
		Percentage	100.0%	100.0%	100.0%

Table 50 shows that both local and international students would behave the same if they found their opinion conflicted with others. More than half on average (55.4%) would not often insist on their opinion and 17.1% would always insist on their opinion.



Question VI.6. Do you contact your lecturers directly when you have difficulties in your studies?

Table 51 (Question VI.6) Contacting your lecturers directly when you have difficulties in your studies

			Student category		Total
			Australian	International	Australia
Do you contact your lecturers directly when you have difficulties in your studies	yes often	Count	61	179	240
		Percentage	16.1%	28.3%	23.7%
	no, solve myself	Count	82	143	225
		Percentage	21.6%	22.6%	22.3%
	no, solve with others	Count	64	136	200
		Percentage	16.9%	21.5%	19.8%
	only when absolutely essential	Count	123	143	266
		Percentage	32.5%	22.6%	26.3%
	no, never	Count	49	31	80
		Percentage	12.9%	4.9%	7.9%
Total		Count	379	632	1011
		Percentage	100.0%	100.0%	100.0%

Table 51 shows that international students are more likely to contact lecturers when they have difficulties than local students (28.3% vs. 16.1%) while local students prefer to contact lecturers only when absolutely essential (32.5% vs. 22.6%).

Question VI.7. Do you doubt the correctness of your opinion when it is different from your lecturers'?

Table 52 (Question VI.7) Doubting the correctness of your opinion when it is different from your lecturers'

			Student category		Total
			Australian	International	Australia
Do you doubt the correctness of your opinion when it is different from your lecturers'	yes, always	Count	66	157	223
		Percentage	17.4%	25.0%	22.1%
	sometimes	Count	271	417	688
		Percentage	71.3%	66.4%	68.3%
	not at all	Count	40	48	88
		Percentage	10.5%	7.6%	8.7%
	I will do more study	Count	3	5	8
		Percentage	.8%	.8%	.8%
	others	Count	0	1	1
		Percentage	.0%	.2%	.1%
Total		Count	380	628	1008
		Percentage	100.0%	100.0%	100.0%



Table 52 shows that more local students are confident about their correctness when their opinions differ from their lectures (17.4% vs. 25% of international students). More local students do not care at all compared with the international students (10.5% vs. 7.6% respectively).

Question VI.8. Do you think the final mark/grade reflects students' achievement in the subject?

Table 53 (Question VI.8) Thinking the final mark/grade reflects students' achievement in the subject

			Student category		Total
			Australian	International	Australia
Do you think the final mark/grade reflects students' achievement in the subject	yes, completely	Count	50	113	163
		Percentage	13.2%	17.9%	16.1%
	to some degree	Count	214	308	522
		Percentage	56.3%	48.9%	51.7%
	no but also other factors	Count	93	172	265
		Percentage	24.5%	27.3%	26.2%
	no not at all	Count	23	37	60
		Percentage	6.1%	5.9%	5.9%
Total		Count	380	630	1010
		Percentage	100.0%	100.0%	100.0%

Table 53 shows that an average of 50% of students believe that final mark can explain the students' achievement to some extent.

Question VI.9. Do you often argue with lecturers for grades?

Table 54 (Question VI.9) Often argue with lecturers for grades

			Student category		Total
			Australian	International	Australia
Do you often argue with lecturers for grades	yes	Count	17	30	47
		Percentage	4.5%	4.8%	4.7%
	sometimes	Count	43	128	171
		Percentage	11.4%	20.3%	17.0%
	very seldom	Count	167	262	429
		Percentage	44.2%	41.6%	42.6%
	never	Count	151	210	361
		Percentage	39.9%	33.3%	35.8%
Total		Count	378	630	1008
		Percentage	100.0%	100.0%	100.0%

Table 54 shows that some international students are more likely to argue sometimes with lecturers for their grades than local students (20.3% vs. 11.4% respectively). However, on average, a majority of students never (35.8%) or very seldom (42.6%)



argue on this.

Question VI.10. Do you like to work with students from the same background as yourself in assignments?

Table 55 (Question VI.10) Working with students from the same background as yourself in assignments

			Student category		Total
			Australian	International	Australia
Do you like to work with students from the same background as yourself in assignments	always	Count	103	141	244
		Percentage	27.5%	22.5%	24.4%
	only if nice people	Count	95	162	257
		Percentage	25.3%	25.8%	25.6%
	only if high mark	Count	35	74	109
		Percentage	9.3%	11.8%	10.9%
	never mind	Count	142	250	392
		Percentage	37.9%	39.9%	39.1%
Total		Count	375	627	1002
		Percentage	100.0%	100.0%	100.0%

Table 55 shows that on average one third of all students (39.1%) do not mind working with students from the same background, but 24.4% of students care about the background as well as the personality (25.6%).

Question VI.11. Have you taken part in any university and community activities that is not fully related to your courses?

Table 56 (Question VI.11) Having taken part in any university activities that are not fully related to your course

			Student category		Total
			Australian	International	Australia
Have you taken part in any university activities that are not fully related to your course	often	Count	60	75	135
		Percentage	15.8%	12.0%	13.4%
	rarely	Count	146	255	401
		Percentage	38.5%	40.7%	39.9%
	no	Count	173	295	468
		Percentage	45.6%	47.1%	46.6%
	other	Count	0	1	1
		Percentage	.0%	.2%	.1%
Total		Count	379	626	1005
		Percentage	100.0%	100.0%	100.0%



Table 56 shows that both local and international students don't like to take part in activities which is not fully related to their course. 76.5% have never or rarely taken any activities. Only 13.4% of students love to take part in any activities.

Questionnaire Section VII. Other

Question VII.1. What are the main study difficulties you encountered at university?
In my 1st year:

Table 57 (Question VII.1.A) The main study difficulties you encountered at university in 1st year

			Student category		Total
			Australian	International	Australia
What are the main study difficulties you encountered at university in 1st year	language	Count	18	223	241
		Percentage	4.9%	36.3%	24.6%
	unfamiliar environment	Count	162	195	357
		Percentage	44.5%	31.7%	36.5%
	teaching method	Count	136	135	271
		Percentage	37.4%	22.0%	27.7%
	university education management systems	Count	47	62	109
		Percentage	12.9%	10.1%	11.1%
	environment	Count	1	0	1
		Percentage	.3%	.0%	.1%
Total		Count	364	615	979
		Percentage	100.0%	100.0%	100.0%

Table 57 shows that more international students (36.3% vs. 4.9% local students) encounter language problems during their 1st year of study at university while more local students have environment problems (44.5%) and teaching method problems (37.4%) in their first year of study, even though these two factors are also problematic for international students (31.7% and 22% respectively).

In my 2nd/ 3rd /4th year:

Table 58 (Question VII.1.B) The main study difficulties you encountered at university in 2nd/3rd/4th year

			Student category		Total
			Australian	International	Australia
What are the main study difficulties you encountered at university in 2nd/3rd/4th year	language	Count	13	99	112
		Percentage	5.3%	22.0%	16.1%
	unfamiliar environment	Count	13	58	71
		Percentage	5.3%	12.9%	10.2%
	teaching method	Count	123	144	267
		Percentage			



		Percentage	49.8%	32.0%	38.3%
	university education management systems	Count	98	149	247
		Percentage	39.7%	33.1%	35.4%
Total		Count	247	450	697
		Percentage	100.0%	100.0%	100.0%

Table 58 shows that local students feel that teaching method (49.8%) and university education management systems (39.7%) are the main difficulties in subsequent years of study. International students share the same concerns. In addition, international students find that language difficulties (22%) and environment problems (12.9%) are not such an issue.

Question VII.2. Do you feel any culture shock which influences your study?

Table 59 (Question VII.2) Feeling any culture shock which influences your study

			Student category		Total
			Australian	International	Australia
Do you feel any culture shock which influences your study	yes	Count	46	120	166
		Percentage	12.3%	19.5%	16.8%
	no	Count	259	239	498
		Percentage	69.4%	38.9%	50.5%
	not much	Count	66	255	321
		Percentage	17.7%	41.5%	32.5%
	other	Count	2	0	2
		Percentage	.5%	.0%	.2%
Total		Count	373	614	987
		Percentage	100.0%	100.0%	100.0%

Table 59 shows that more than half the local students feel no culture shock (69.4%) and 17.7% of them feel a little. Of the international students, 19.5% feel culture shock and 41.5% feel a little.

From the above analysis, we can obtain a picture of the perspectives of international students and local students through these questions. Section 4.2 provides further analysis to test the hypotheses we designed and generates more findings.

4.2 Correlation analysis of survey data and hypotheses test

In order to determine whether there is any difference between responses from international students and local students, correlation analysis of the student survey data was carried out in the following steps:

1. Each student is classified into one of two groups – those who have spent most of their high school years in Australia or those who have not (labelled as “Australia” or “not Australia”). We define “international student” as someone who has spent most of their high school years studying outside Australia.
2. Cross-tabulation analysis is conducted on responses to each question, using



a chi-square test to determine whether responses are dependent on the classification of students.

3. Any outcome that returns a p-value of less than or equal to 0.05 will be considered as significant, indicating that there is an association between the two classifications of students (labelled as “Australia” and “not Australia”) and the responses to a particular question. By “association” we mean the pattern of responses to a particular question from one group of students (“Australia”) is different from the other group (“not Australia”).
4. However, the chi-square test only identifies the existence of an association; it does not measure the strength of that association. To achieve that we need additional statistical tests. Given that we are mostly dealing with nominal data, Phi and Cramer’s V are the most suitable tests. The calculation of both Phi and Cramer’s V involves modifying chi-square to take into consideration the sample size and degrees of freedom, and their values are restricted to between 0 and 1, where 0 indicates no association and 1 indicates a perfect association. The Phi statistic is only accurate for 2x2 contingency table. When variables have more than two categories, Cramer’s V is more useful. When variables have only two categories, Phi and Cramer’s V are identical.
5. As mentioned above, Phi and Cramer’s V statistics range from 0 to 1 with 1 indicating the highest strength of association. However, there is little literature showing the exact interpretation of specific values within that range. For the purpose of this study, we define outcomes with Phi and Cramer’s V values less than 0.3 as being too weak an association to be included in the results.

We conduct the correlation analysis on all student data, and repeat the process for all IT students and again for all Business students. Output results of the analyses of these three groups of students are summarised in Tables 60, 61 and 62 respectively.

In each of these tables, the first column shows the question number from the student questionnaire, the second column shows the actual question, the third column shows p-values of the chi-square test in cross-tabulation, and the fourth column shows the interpretation of p-values with those less than or equal to 0.05 being considered as “dependent” – meaning there is an association between the pattern of responses and the categories of students (labelled as “Australia” or “not Australia”). The last column of the table shows the values of Phi & Cramer’s V with values higher than 0.3 highlighted. The reason for using just one column to display both Phi and Cramer’s V is that the output from SPSS shows that these two values are the same for each question.

The test hypotheses designed to test the correlation between the two categories of students and the responses of each question are shown in Section 4.2.1. The same set of hypotheses is used for the three sets of correlation analyses. The summarised output results of the three sets of analyses are shown in Sections 4.2.2, 4.2.3 and 4.2.4 respectively.

4.2.1 Hypotheses for correlation analyses

The name of each hypothesis corresponds to the relevant question number in the student survey questionnaire.

Hypothesis II.1

H_0 : Student category (local or international) and attitude toward textbook significance in learning are unrelated (Independent).



Ha: Student category (local or international) and attitude toward textbook
Significance Level ($\alpha = 0.05$)

Hypothesis II.2

*H*₀: Student category (local or international) and textbook usage rate in learning are unrelated (Independent).

Ha: Student category (local or international) and textbook usage rate in learning are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.3

*H*₀: Student category (local or international) and low textbook usage rate in learning are unrelated (Independent).

Ha: Student category (local or international) and low textbook usage rate in learning are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.4

*H*₀: Student category (local or international) and whether or not students have difficulties reading textbooks are unrelated (Independent).

Ha: Student category (local or international) and whether or not students have difficulties reading textbooks are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.5

*H*₀: Student category (local or international) and textbook reading style is unrelated (Independent).

Ha: Student category (local or international) and textbook reading style is related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.6.A

*H*₀: Student category (local or international) and whether or not textbook should emphasise theories are unrelated (Independent).

Ha: Student category (local or international) and whether or not textbook should emphasise theories are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.6.B

*H*₀: Student category (local or international) and whether or not textbook should introduce novel ideas are unrelated (Independent).

Ha: Student category (local or international) and whether or not textbook should introduce novel ideas are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypothesis II.6.C

*H*₀: Student category (local or international) and whether or not textbook should encourage students to think are unrelated (Independent).

Ha: Student category (local or international) and whether or not textbook should encourage students to think are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.6.D

*H*₀: Student category (local or international) and whether or not textbook should give many examples are unrelated (Independent).

Ha: Student category (local or international) and whether or not textbook should give many examples are related (Dependent).



Significance Level ($\alpha = 0.05$)

Hypotheses II.6.E

H_0 : Student category (local or international) and whether or not textbook should provide up-to-date knowledge are unrelated (Independent).

H_a : Student category (local or international) and whether or not textbook should provide up-to-date knowledge are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.6.F

H_0 : Student category (local or international) and whether or not textbook should provide many case studies are unrelated (Independent).

H_a : Student category (local or international) and whether or not textbook should provide many case studies are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.6.G

H_0 : Student category (local or international) and whether or not textbook should combine theory with practice and applications are unrelated (Independent).

H_a : Student category (local or international) and whether or not textbook should combine theory with practice and applications are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.7

H_0 : Student category (local or international) and whether or not students use reference books written in other languages are unrelated (Independent).

H_a : Student category (local or international) and whether or not students use reference books written in other languages are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.8

H_0 : Student category (local or international) and whether or not students are satisfied with the textbook are unrelated (Independent).

H_a : Student category (local or international) and whether or not students are satisfied with the textbook are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.9

H_0 : Student category (local or international) and how often students read lecture notes are unrelated (Independent).

H_a : Student category (local or international) and how often students read lecture notes are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses II.10

H_0 : Student category (local or international) and whether or not they use other reference materials are unrelated (Independent).

H_a : Student category (local or international) and whether or not they use other reference materials are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.1

H_0 : Student category (local or international) and whether or not the teaching method is suitable are unrelated (Independent).

H_a : Student category (local or international) and whether or not the teaching method is suitable are related (Dependent).

Significance Level ($\alpha = 0.05$)



Hypotheses III.2

H_0 : Student category (local or international) and the attitude that the teaching method is not suitable are unrelated (Independent).

H_a : Student category (local or international) and the attitude that the teaching method is not suitable are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.3.A

H_0 : Student category (local or international) and preferred face-to-face lectures and students taking notes are unrelated (Independent).

H_a : Student category (local or international) and preferred face-to-face lectures and students taking notes are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.3.B

H_0 : Student category (local or international) and preferred case study group discussion and interaction are unrelated (Independent).

H_a : Student category (local or international) and preferred case study group discussion and interaction are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.3.C

H_0 : Student category (local or international) and preferred self-learning are unrelated (Independent).

H_a : Student category (local or international) and preferred self-learning are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.3.D

H_0 : Student category (local or international) and preferred fewer lectures and more labs and tutorials are unrelated (Independent).

H_a : Student category (local or international) and preferred fewer lectures and more labs and tutorials are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.4.A

H_0 : Student category (local or international) and preferred each concept has one definition are unrelated (Independent).

H_a : Student category (local or international) and preferred each concept has one definition are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.4.B

H_0 : Student category (local or international) and preferred fewer class questions from students are unrelated (Independent).

H_a : Student category (local or international) and preferred fewer class questions from students are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.4.C

H_0 : Student category (local or international) and preferred fewer group assignments and more individual assignments are unrelated (Independent).

H_a : Student category (local or international) and preferred fewer group assignments and more individual assignments are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses III.4.D

H_0 : Student category (local or international) and preferred fewer student



presentations are unrelated (Independent).
Ha: Student category (local or international) and preferred fewer student presentations are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.4.E

H₀: Student category (local or international) and preferred lecturers to arrange group assignments are unrelated (Independent).
Ha: Student category (local or international) and preferred lecturers to arrange group assignments are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.4.F

H₀: Student category (local or international) and preferred working in group with local students are unrelated (Independent).
Ha: Student category (local or international) and preferred working in group with local students are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.4.G

H₀: Student category (local or international) and preferred working in groups with international students are unrelated (Independent).
Ha: Student category (local or international) and preferred working in groups with international students are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.5

H₀: Student category (local or international) and main differences between teaching methods here and previously are unrelated (Independent).
Ha: Student category (local or international) and main differences between teaching methods here and previously are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.6

H₀: Student category (local or international) and whether or not students like lecturers to ask questions are unrelated (Independent).
Ha: Student category (local or international) and whether or not students like lecturers to ask questions are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.7

H₀: Student category (local or international) and what is important when evaluating the subject are unrelated (Independent).
Ha: Student category (local or international) and what is important when evaluating the subject are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.8

H₀: Student category (local or international) and centre of teaching and learning method are unrelated (Independent).
Ha: Student category (local or international) and centre of teaching and learning method are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses III.9

H₀: Student category (local or international) and whether students are satisfied with the teaching methods are unrelated (Independent).
Ha: Student category (local or international) and whether students are satisfied with



the teaching methods are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses IV.1

H_0 : Student category (local or international) and whether students have any experience with credit-point systems in their previous education are unrelated (Independent).

H_a : Student category (local or international) and whether students have any experience with credit-point systems in their previous education are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses IV.2

H_0 : Student category (local or international) and whether students have any experience in selecting subjects and sub-majors by themselves are unrelated (Independent).

H_a : Student category (local or international) and whether students have any experience in selecting subjects and sub-majors by themselves are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses IV.3

H_0 : Student category (local or international) and whether students would like to be able to take more elective subjects are unrelated (Independent).

H_a : Student category (local or international) and whether students would like to be able to take more elective subjects are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses IV.4

H_0 : Student category (local or international) and whether or not students feel that their university has provided sufficient help on the education system are unrelated (Independent).

H_a : Student category (local or international) and whether or not students feel that their university has provided sufficient help on the education system are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses IV.5

H_0 : Student category (local or international) and whether they have difficulties selecting subjects are unrelated (Independent).

H_a : Student category (local or international) whether they have difficulties selecting subjects are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses IV.6

H_0 : Student category (local or international) and where students prefer to study are unrelated (Independent).

H_a : Student category (local or international) and where students prefer to study are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses V.1

H_0 : Student category (local or international) and main difficulties in cross-cultural communication are unrelated (Independent).

H_a : Student category (local or international) and main difficulties in cross-cultural communication are related (Dependent).

Significance Level ($\alpha = 0.05$)



Hypotheses V.2

H_0 : Student category (local or international) and English language difficulties are unrelated (Independent).

H_a : Student category (local or international) and English language difficulties are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses V.3

H_0 : Student category (local or international) and English language difficulties in doing assignments are unrelated (Independent).

H_a : Student category (local or international) and English language difficulties in doing assignments are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses V.4

H_0 : Student category (local or international) and English language difficulties in class participations are unrelated (Independent).

H_a : Student category (local or international) and English language difficulties in class participations are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses V.5

H_0 : Student category (local or international) and English language difficulties in class participation are unrelated (Independent).

H_a : Student category (local or international) and English language difficulties in class participation are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses VI.1

H_0 : Student category (local or international) and concerns when evaluating lecturers' performance are unrelated (Independent).

H_a : Student category (local or international) and concerns when evaluating lecturers' performance are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses VI.2

H_0 : Student category (local or international) and evaluating a student are unrelated (Independent).

H_a : Student category (local or international) and evaluating a student are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses VI.3

H_0 : Student category (local or international) and whether or not students like to express their ideas and opinions in class are unrelated (Independent).

H_a : Student category (local or international) and whether or not students like to express their ideas and opinions in class are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses VI.4

H_0 : Student category (local or international) and whether students care about their opinion being the same as others' are unrelated (Independent).

H_a : Student category (local or international) and whether students care about their opinion being the same as others' are related (Dependent).

Significance Level ($\alpha = 0.05$)

Hypotheses VI.5

H_0 : Student category (local or international) and whether they insist on their opinion



when it conflicts with others are unrelated (Independent).
Ha: Student category (local or international) and whether they insist on their opinion when it conflicts with others are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.6

H_0 : Student category (local or international) and whether students contact lecturers directly when they have difficulties are unrelated (Independent).
Ha: Student category (local or international) and whether students contact lecturers directly when they have difficulties are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.7

H_0 : Student category (local or international) and whether they doubt the correctness of their opinion when it is different from the lecturers' are unrelated (Independent).
Ha: Student category (local or international) and whether they doubt the correctness of their opinion when it is different from the lecturers' are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.8

H_0 : Student category (local or international) and whether they believe the final marks reflect students' achievements are unrelated (Independent).
Ha: Student category (local or international) and whether they believe the final marks reflect students' achievements are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.9

H_0 : Student category (local or international) and whether students often argue with lecturers for grades are unrelated (Independent).
Ha: Student category (local or international) and whether students often argue with lecturers for grades are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.10

H_0 : Student category (local or international) and whether they like to work with students from the same background in assignments are unrelated (Independent).
Ha: Student category (local or international) and whether they like to work with students from the same background in assignments are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VI.11

H_0 : Student category (local or international) and whether they have taken part in any university activities that are not fully related to their course are unrelated (Independent).
Ha: Student category (local or international) and whether they have taken part in any university activities that are not fully related to their course are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VII.1.1

H_0 : Student category (local or international) and the main study difficulties encountered at university in 1st year are unrelated (Independent).
 H_a : Student category (local or international) and the main study difficulties encountered at university in 1st year are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VII.1.2

H_0 : Student category (local or international) and the main study difficulties encountered at university in 2/3/4 year are unrelated (Independent).
Ha: Student category (local or international) and the main study difficulties



encountered at university in 2/3/4 year are related (Dependent).
Significance Level ($\alpha = 0.05$)

Hypotheses VII.2

H_0 : Student category (local or international) and whether they feel any culture shock which influences your study are unrelated (Independent).

H_a : Student category (local or international) and whether they feel any culture shock which influences your study are related (Dependent).

Significance Level ($\alpha = 0.05$)

4.2.2 Correlation analysis for all students

The summarised output results of the correlation analysis on responses from all 1026 students are shown in Table 60 below. In this table, questions with test results that yielded a p-value of 0.05 or below are deemed significant and are marked as “dependent”, which means the responses to these questions from the two categories (local and international students) were significantly different in pattern. These results will be further explained in Section 6 “Findings”.

Table 60 Correlations analysis results of all students

Question No	Questions	P-value	Note	Phi-value
II Teaching contents and textbooks				
II.1	Which of the following best describes the textbooks you are using (and have used) in your study?	0.009	Dependent	0.106
II.2	In what proportion of current and past subjects studied do you use a textbook?	0	Dependent	0.167
II.3	If you chose D in question 2, what is the main reason?	0.241	Independent	
II.4	What difficulties do you have reading your textbooks?	0	Dependent	0.454
II.5	On average, what do you read in your textbooks?	0	Dependent	0.167
II.6.A	Textbooks you prefer: emphasise theories	0.001	Dependent	0.138
II.6.B	Textbooks you prefer: introduce novel ideas	0.233	Independent	
II.6.C	Textbooks you prefer: encourage students to think	0.027	Dependent	0.104
II.6.D	Textbooks you prefer: give many examples to help with exercises and assignments	0.241	Independent	
II.6.E	Textbooks you prefer: provide up-to-date knowledge and techniques	0.254	Independent	
II.6.F	Textbooks you prefer: provide many case studies to help understand applications/techniques/skills	0.681	Independent	
II.6.G	Textbooks you prefer: combine theory with practice and applications	0.079	Independent	



II.7	Do you use any reference books written in other languages?	0	Dependent	0.212
II.8	Are you satisfied with the textbooks you have used?	0.183	Independent	
II.9	How often do you read your lecture notes?	0.022	Dependent	0.097
II.10	you use other reference materials (books or other materials such as those from the Internet)?	0.088	Independent	
III Teaching and learning methods				
III.1	Do you feel that the teaching methods in your current subjects are suitable?	0	Dependent	0.186
III.2	If you select C in Question 1, please give your reasons:	0.01	Dependent	0.278
III.3.A	Preferred teaching methods? Face-to-face lectures and students taking notes	0.554	Independent	
III.3.B	Preferred teaching methods? Case studies, class discussions and interaction between lecturers and students;	0.855	Independent	
III.3.C	Preferred teaching methods? Self-learning based with lecturers' supervision;	0.359	Independent	
III.3.D	Preferred teaching methods? Fewer lectures and more labs and tutorials.	0.166	Independent	
III.4.A	How can this help in learning and future development: Each concept has one definition only so there is no confusion	0.281	Independent	
III.4.B	How can this help in learning and future development: Fewer class questions from students so lecturers have more time to talk	0	Dependent	0.161
III.4.C	How can this help in learning and future development: Fewer group assignments and more individual assignments	0	Dependent	0.183
III.4.D	How can this help in learning and future development: Fewer student presentations and more lectures;	0.077	Independent	
III.4.E	How can this help in learning and future development: Lecturers arrange assignment groups rather than students	0	Dependent	0.145
III.4.F	How can this help in learning and future development: Working in groups with local students	0.358	Independent	
III.4.G	How can this help in learning and future development: Working in groups with international students	0	Dependent	0.394
III.5	What are the main differences between teaching methods here and teaching methods in your previous education	0	Dependent	0.311
III.6	Do you like lecturers to ask questions in class?	0.097	Independent	



III.7	What are you most concerned about when evaluating a subject?	0.001	Dependent	0.138
III.8	In general, do you prefer	0.158	Independent	
III.9	In general, how satisfied are you with the teaching methods in your current subjects?	0.248	Independent	
IV Education Management systems				
IV.1	Do you have any experience with credit-point systems in your previous education?	0	Dependent	0.294
IV.2	Do you have any experience in selecting subjects and sub-majors by yourself?	0.053	Independent	
IV.3	Would you like to be able to take more elective subjects?	0	Dependent	0.140
IV.4	Do you feel that your department/university have provided you with sufficient guidance and help on studying in the Australian university education system?	0	Dependent	0.163
IV.5	Do you have any difficulties in selecting subjects and sub-majors by yourself?	0.068	Independent	
IV.6	Do you prefer to study?	0	Dependent	0.254
V. Language				
V.1	Due to the cultural and language differences, sometimes it is not easy to communicate with those students from different cultural backgrounds. What do you think are the main difficulties in communicating?	0	Dependent	0.465
V.2	Do you have any English language- related difficulties in understanding lectures?	0	Dependent	0.389
V.3	Do you have any English language-related difficulties when completing your homework?	0	Dependent	0.509
V.4	Are you confident about your English when participating in-class discussions?	0	Dependent	0.547
V.5	Do you have any English language related difficulties in class presentations?	0	Dependent	0.579
VI. Culture-based teaching & learning concepts				
VI.1	What are you most concerned about when evaluating lecturers' performance? They:	0	Dependent	0.248
VI.2	Who do you think are good students?	0	Dependent	0.206
VI.3	Do you like to express your ideas and opinions in class?	0.099	Independent	
VI.4	Do you care about whether your opinions are the same as others?	0	Dependent	0.179
VI.5	Do you insist on your opinion when it conflicts with others'?	0.73	Independent	
VI.6	Do you contact your lecturers directly when you have difficulties in your studies?	0	Dependent	0.212
VI.7	Do you doubt the correctness of your opinion when it is different from your lecturers'?	0.042	Dependent	0.099



VI.8	Do you think the final mark/grade reflects students' achievement in this subject?	0.085	Independent	
VI.9	Do you often argue with lecturers for grades?	0.002	Dependent	0.120
VI.10	Do you like to work with students from the same background as you in assignments?	0.265	Independent	
VI.11	Have you taken part in any university and community activities that are not fully related to your course?	0.307	Independent	
VII. Other				
VII.1.1	What are the main study difficulties you encountered at university? In my 1st Year	0	Dependent	0.356
VII.1.2	What are the main study difficulties you encountered at university? In my 2nd/ 3rd /4th Year	0	Dependent	0.273
VII.2	Do you feel any culture shock which influences your study?	0	Dependent	0.308

4.2.3 Correlation analysis for IT students

The summarised output results of the correlation analysis on responses from all students who were majoring in IT are shown in Table 61 below. In this table, questions with test results that yielded a p-value of 0.05 or below are deemed significant and are marked as “dependent”, which means the responses to these questions from the two categories (local and international students) were significantly different in pattern. These results will be further explained in section 6 “Findings”.

Table 61 Correlation analysis results of IT students

Question No	Questions	P-value	Note	Phi
II Teaching contents and textbooks				
II.1	Which of the following best describes the textbooks you are using (and have used) in your study?	0.078	Independent	
II.2	In what proportion of current and past subjects studied do you use a textbook?	0.261	Independent	
II.3	If you chose D in question 2, what is the main reason?	0.095	Independent	
II.4	What difficulties do you have reading your textbooks?	0	Dependent	0.392
II.5	On average, what do you read in your textbooks?	0	Dependent	0.282
II.6.A	Textbooks you prefer: emphasise theories	0.29	Independent	
II.6.B	Textbooks you prefer: introduce novel ideas	0.25	Independent	
II.6.C	Textbooks you prefer: encourage students to think	0.099	Independent	
II.6.D	Textbooks you prefer: give many examples to help with exercises and assignments	0.364	Independent	



II.6.E	Textbooks you prefer: provide up-to-date knowledge and techniques	0.071	Independent	
II.6.F	Textbooks you prefer: provide many case studies to help understand applications/techniques/skills	0.729	Independent	
II.6.G	Textbooks you prefer: combine theory with practice and applications	0.79	Independent	
II.7	Do you use any reference books written in other languages?	0	Dependent	0.248
II.8	Are you satisfied with the textbooks you have used?	0.209	Independent	
II.9	How often do you read your lecture notes?	0.174	Independent	
II.10	you use other reference materials (books or other materials such as those from the Internet)?	0.044	Dependent	0.167
III Teaching and learning methods				
III.1	Do you feel that the teaching methods in your current subjects are suitable?	0.033	Dependent	0.173
III.2	If you selected C in Question 1, please give your reasons	0.105	Independent	
III.3.A	Preferred teaching methods? Face-to-face lectures and students taking notes	0.739	Independent	
III.3.B	Preferred teaching methods? Case studies, class discussions and interaction between lecturers and students	0.678	Independent	
III.3.C	Preferred teaching methods? Self-learning based with lecturers' supervision	0.907	Independent	
III.3.D	Preferred teaching methods? Fewer lectures and more labs and tutorials.	0.847	Independent	
III.4.A	How can this help in learning and future development: Each concept has one definition only so there is no confusion	0.697	Independent	
III.4.B	How can this help in learning and future development: Fewer class questions from students so lecturers have more time to talk	0	Dependent	0.089
III.4.C	How can this help in learning and future development: Fewer group assignments and more individual assignments	0.161	Independent	
III.4.D	How can this help in learning and future development: Fewer student presentations and more lectures	0.52	Independent	
III.4.E	How can this help in learning and future development: Lecturers arrange assignment groups rather than students	0.008	Dependent	0.219
III.4.F	How can this help in learning and future development: Working in groups with local students	0.281	Independent	
III.4.G	How can this help in learning and future development: Working in groups with international students	0	Dependent	0.462
III.5	What are the main differences between teaching methods here and teaching methods in your previous education	0	Dependent	0.307
III.6	Do you like lecturers to ask questions in class?	0.001	Dependent	0.25
III.7	What are you most concerned about when evaluating a subject?	0.088	Independent	
III.8	In general, do you prefer	0.662	Independent	
III.9	In general, how satisfied are you with the teaching methods in your current subjects?	0.001	Dependent	0.263



IV Education Management systems				
IV.1	Do you have any experience with credit-point systems in your previous education?	0	Dependent	0.31
IV.2	Do you have any experience in selecting subjects and sub-majors by yourself?	0.115	Independent	
IV.3	Would you like to be able to take more elective subjects?	0	Dependent	0.257
IV.4	Do you feel that your department/university has provided you with sufficient guidance and help on studying in the Australian university education system?	0.007	Dependent	0.203
IV.5	Do you have any difficulties in selecting subjects and sub-majors by yourself?	0.008	Dependent	0.218
IV.6	Where do you prefer to study?	0	Dependent	0.29
V. Language				
V.1	Due to the cultural and language differences, sometimes it is not easy to communicate with those students from different cultural backgrounds. What do you think are the main difficulties in communicating?	0	Dependent	0.508
V.2	Do you have any English language-related difficulties in understanding lectures?	0	Dependent	0.265
V.3	Do you have any English language-related difficulties when completing your homework?	0	Dependent	0.482
V.4	Are you confident about your English when participating in-class discussions?	0	Dependent	0.543
V.5	Do you have any English language-related difficulties in class presentations?	0	Dependent	0.513
VI. Culture-based teaching & learning concepts				
VI.1	What are you most concerned about when evaluating lecturers' performance?	0.029	Dependent	0.193
VI.2	Who do you think are good students?	0.233	Independent	
VI.3	Do you like to express your ideas and opinions in class?	0.626	Independent	
VI.4	Do you care about whether your opinions are the same as others?	0.007	Dependent	0.204
VI.5	Do you insist on your opinion when it conflicts with others'?	0.877	Independent	
VI.6	Do you contact your lecturers directly when you have difficulties in your studies?	0	Dependent	0.281
VI.7	Do you doubt the correctness of your opinion when it is different from your lecturers'?	0.063	Independent	
VI.8	Do you think the final mark/grade reflects students' achievement in this subject?	0.462	Independent	
VI.9	Do you often argue with lecturers for grades?	0.095	Independent	
VI.10	Do you like to work with students from the same background as you in assignments?	0.427	Independent	
VI.11	Have you taken part in any university and community activities that are not fully related to your course?	0.278	Independent	



VII. Other				
VII.1.1	What are the main study difficulties you encountered at university? In my 1st Year	0	Dependent	0.343
VII.1.2	What are the main study difficulties you encountered at university? In my 2nd/ 3rd /4th Year	0.007	Dependent	0.282
VII.2	Do you feel any culture shock which influences your study?	0	Dependent	0.346

4.2.4 Correlation analysis for business students

The summarised output results of correlation analysis on responses from all students who were majoring in Business are shown in Table 62 below. In this table, questions with test results that yielded a p-value of 0.05 or below are deemed significant and are marked as “dependent”, which means the responses to these questions from the two categories (local and international students) were significantly different in pattern. These results will be further explained in Section 6 “Findings”.

Table 62 Correlations analysis results of business students

Question No	Questions	P-value	Note	Phi-value
II Teaching contents and textbooks				
II.1	Which of the following best describes the textbooks you are using (and have used) in your study?	0.129	Independent	
II.2	In what proportion of current and past subjects studied do you use a textbook?	0	Dependent	0.213
II.3	If you chose D in question 2, what is the main reason?	0.176	Independent	
II.4	What difficulties do you have reading your textbooks?	0	Dependent	0.489
II.5	On average, what do you read in your textbooks?	0	Dependent	0.183
II.6.A	Textbooks you prefer: emphasise theories	0.005	Dependent	0.167
II.6.B	Textbooks you prefer: introduce novel ideas	0.262	Independent	
II.6.C	Textbooks you prefer: encourage students to think	0.264	Independent	
II.6.D	Textbooks you prefer: give many examples to help with exercises and assignments	0.065	Independent	
II.6.E	Textbooks you prefer: provide up-to-date knowledge and techniques	0.454	Independent	
II.6.F	Textbooks you prefer: provide many case studies to help understand applications/techniques/skills	0.898	Independent	



II.6.G	Textbooks you prefer: combine theory with practice and applications	0.137	Independent	
II.7	Do you use any reference books written in other languages?	0	Dependent	0.19
II.8	Are you satisfied with the textbooks you have used?	0.093	Independent	
II.9	How often do you read your lecture notes?	0.02	Dependent	0.135
II.10	Do you use other reference materials (books or other materials such as those from the Internet)?	0.673	Independent	
III Teaching and learning methods				
III.1	Do you feel that the teaching methods in your current subjects are suitable?	0	Dependent	0.218
III.2	If you selected C in Question 1, please give your reasons:	0.031	Dependent	0.335
III.3.A	Preferred teaching methods? Face-to-face lectures and students taking notes	0.587	Independent	
III.3.B	Preferred teaching methods? Case studies, class discussions and interaction between lecturers and students;	0.759	Independent	
III.3.C	Preferred teaching methods? Self-learning based with lecturer supervision;	0.649	Independent	
III.3.D	Preferred teaching methods? Fewer lectures and more labs and tutorials.	0.278	Independent	
III.4.A	How can this help in learning and future development: Each concept has one definition only so there is no confusion	0.119	Independent	
III.4.B	How can this help in learning and future development: Fewer class questions from students so lecturers have more time to talk	0.365	Independent	
III.4.C	How can this help in learning and future development: Fewer group assignments and more individual assignments	0	Dependent	0.256
III.4.D	How can this help in learning and future development: Fewer student presentations and more lectures;	0.031	Dependent	0.141
III.4.E	How can this help in learning and future development: Lecturers arrange assignment groups rather than students	0.063	Independent	
III.4.F	How can this help in learning and future development: Working in groups with local students	0.768	Independent	
III.4.G	How can this help in learning and future development: Working in groups with international students	0	Dependent	0.392
III.5	What are the main differences between teaching methods here and teaching methods in your previous education	0	Dependent	0.334



III.6	Do you like lecturers to ask questions in class?	0.816	Independent	
III.7	What are you most concerned about when evaluating a subject?	0	Dependent	0.21
III.8	In general, do you prefer	0.181	Independent	
III.9	In general, how satisfied are you with the teaching methods in your current subjects?	0.752	Independent	
IV Education Management systems				
IV.1	Do you have any experience with credit-point systems in your previous education?	0	Dependent	0.263
IV.2	Do you have any experience in selecting subjects and sub-majors by yourself?	0.374	Independent	
IV.3	Would you like to be able to take more elective subjects?	0.001	Dependent	0.163
IV.4	Do you feel that your department/university has provided you with sufficient guidance and help on studying in the Australian university education system?	0.007	Dependent	0.151
IV.5	Do you have any difficulties in selecting subjects and sub-majors by yourself?	0.365	Independent	
IV.6	Where do you prefer to study?	0	Dependent	0.262
V. Language				
V.1	Due to the cultural and language differences, sometimes it is not easy to communicate with those students from different cultural backgrounds. What do you think are the main difficulties in communicating?	0	Dependent	0.487
V.2	Do you have any English language-related difficulties in understanding lectures?	0	Dependent	0.462
V.3	Do you have any English language-related difficulties when completing your homework?	0	Dependent	0.547
V.4	Are you confident about your English when participating in-class discussions?	0	Dependent	0.6
V.5	Do you have any English language-related difficulties in class presentations?	0	Dependent	0.538
VI. Culture-based teaching & learning concepts				
VI.1	What are you most concerned about when evaluating lecturers' performance?	0	Dependent	0.286
VI.2	Who do you think are good students?	0	Dependent	0.254
VI.3	Do you like to express your ideas and opinions in class?	0.0453	Dependent	0.071
VI.4	Do you care about whether your opinions are the same as others? I	0	Dependent	0.189
VI.5	Do you insist on your opinion when it conflicts with others'?	0.98	Independent	
VI.6	Do you contact your lecturers directly when you have difficulties in your studies?	0	Dependent	0.231



VI.7	Do you doubt the correctness of your opinion when it is different from your lecturers'?	0.05	Dependent	0.121
VI.8	Do you think the final mark/grade reflects students' achievement in this subject?	0.15	Independent	
VI.9	Do you often argue with lecturers for grades?	0.037	Dependent	0.127
VI.10	Do you like to work with students from the same background as you in assignments?	0.406	Independent	
VI.11	Have you taken part in any university and community activities that are not fully related to your course?	0.394	Independent	
VII. Other				
VII.1.1	What are the main study difficulties you encountered at university? In my 1st Year	0	Dependent	0.374
VII.1.2	What are the main study difficulties you encountered at university? In my 2nd/ 3rd /4th Year	0	Dependent	0.265
VII.2	Do you feel any culture shock which influences your study? Do you feel any culture shock which influences your study?	0	Dependent	0.3

4.3 Open question analysis

This questionnaire has a set of open questions (in Section VII) regarding the main study difficulties international students encountered at university in different years. For example, how does culture shock influence students' study and giving examples? What are the main differences in teaching and learning between the universities in the home country and the university at which they are studying? Do they have any difficulties and frustrations because of cross-cultural problems? In total, 179 undergraduate and 204 postgraduate international students from the five universities answered these questions. Data obtained have been analysed by using keyword-based data classification methods. The main steps include scheme reading the data, classifying the data, making a summary, generating findings and suggestions. The results are combined with statistics-based data analysis. As there are some obvious differences between undergraduate and postgraduate students in these open questions, we will discuss their answers individually.

4.3.1 Undergraduate data analysis

1) Main difference between the universities in their home countries and the universities in Australia

Within the 179 undergraduate students' comments, 52.475% indicated that the main difference between the universities in their home country and the universities in Australia is *teaching method*. For example, one student from China who studied at the University of Sydney, states that "teaching methods in China are more emphasis on results while in Australia value the process a lot". At Edith Cowan University, 9 comments (8.49% of 106 comments from 5 different universities) said that the main difference is the teaching method, while at Curtin University 47 comments (44.34%) observed the same thing, followed by Southern Cross University, University of Sydney, and University of Technology Sydney with 11 comments (10.38%), 28 comments (26.42%), and 11 comments (10.38%) respectively. Figure 4.1 shows the



distribution of these comments across the five universities.

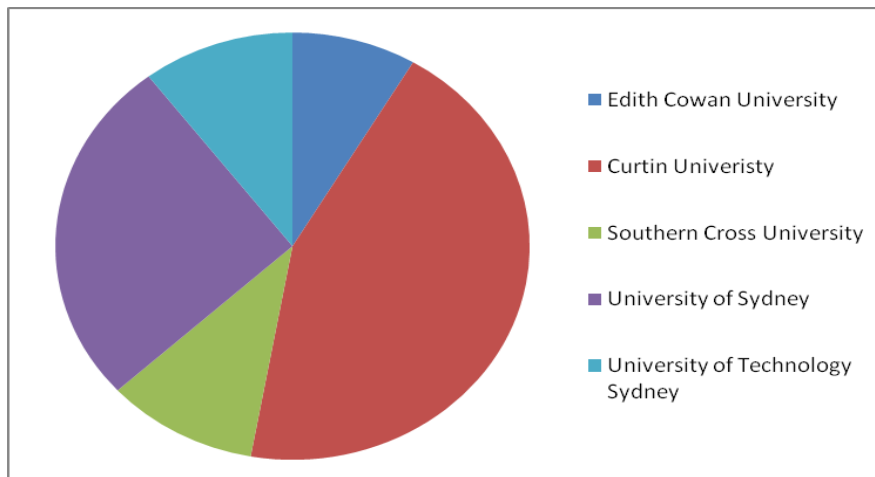


Figure 4.1 Main differences in Teaching Methods indicated by students from the five universities

The second main difference which undergraduate students cited is the environment (13.37%), including study and living environments.

The third difference students identified is that the social communication in Australia is very different from that of their home countries. This can be seen from the 23 comments (11.39%) made by undergraduate students.

The price of textbooks and how to understand the contents of textbooks were also noted as a main difference (21 comments (10.40%) from five different universities). One student from Curtin University claims that he/she needs more time to understand textbook content because the language is English.

There are three other aspects that students perceived as main differences: assignment methods (12 comments (5.94%) from 202 comments), university regulation (11 comments (5.45%) from 202 comments), and cross-cultural issues (2 comments (1%) from 202 comments). For example, one student from the University of Sydney argues that the assignments are more challenging in Australia. Regarding university regulation, a student from Edith Cowan University states that “in China, one semester has more than 16 weeks and more than 6 courses (subjects)”.

Figures 4.2 to 4.6 show the distribution of countries for these identified issues in the five universities.



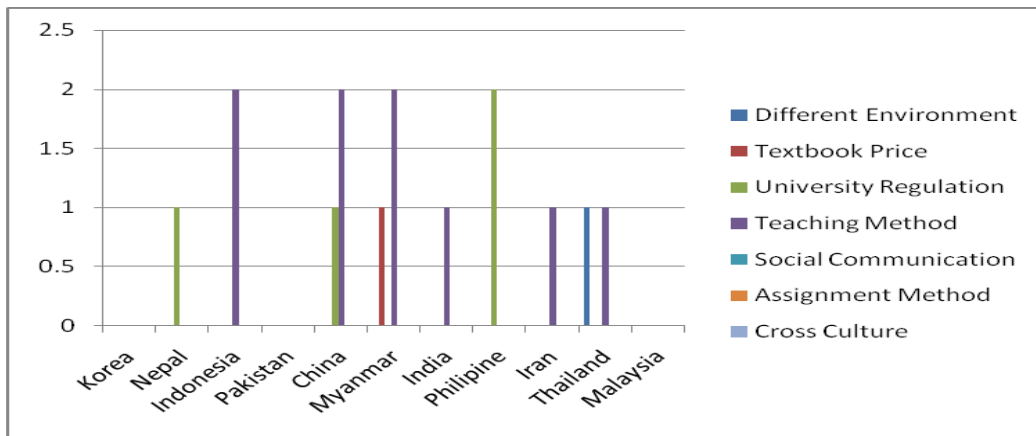


Figure 4.2 Edith Cowan University undergraduate students: main differences

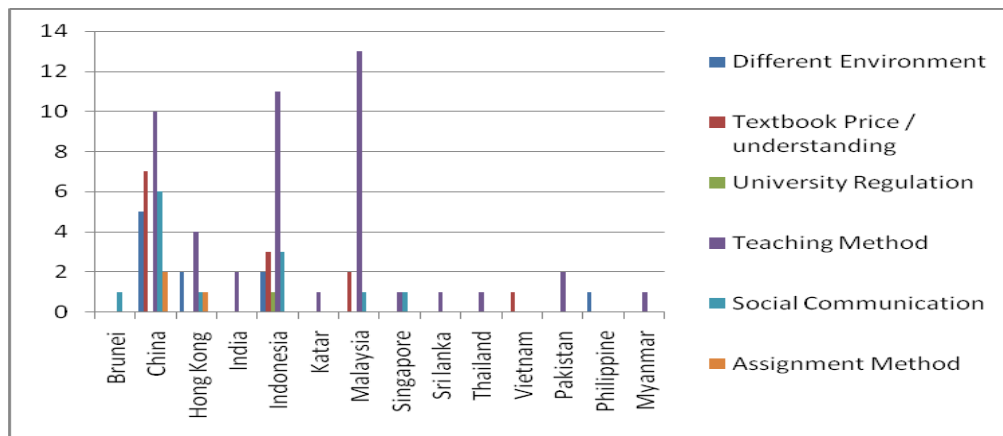


Figure 4.3 Curtin University undergraduate students: main differences

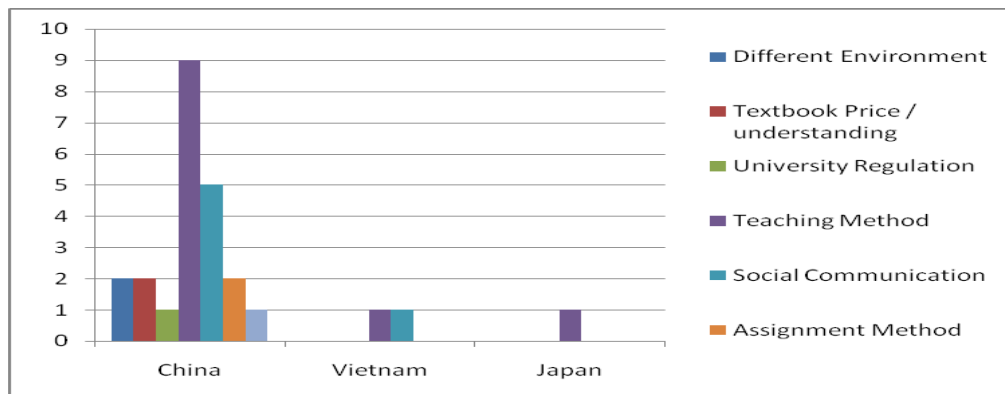


Figure 4.4 Southern Cross University undergraduate students: main differences



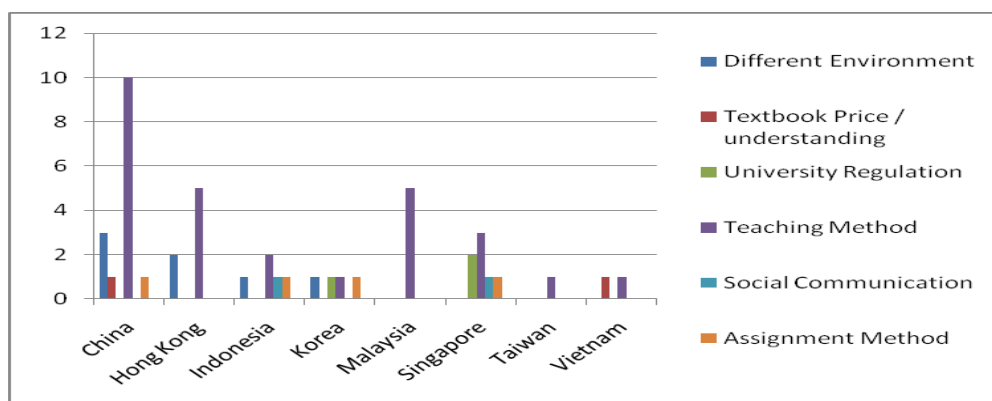


Figure 4.5 University of Sydney undergraduate students: main differences

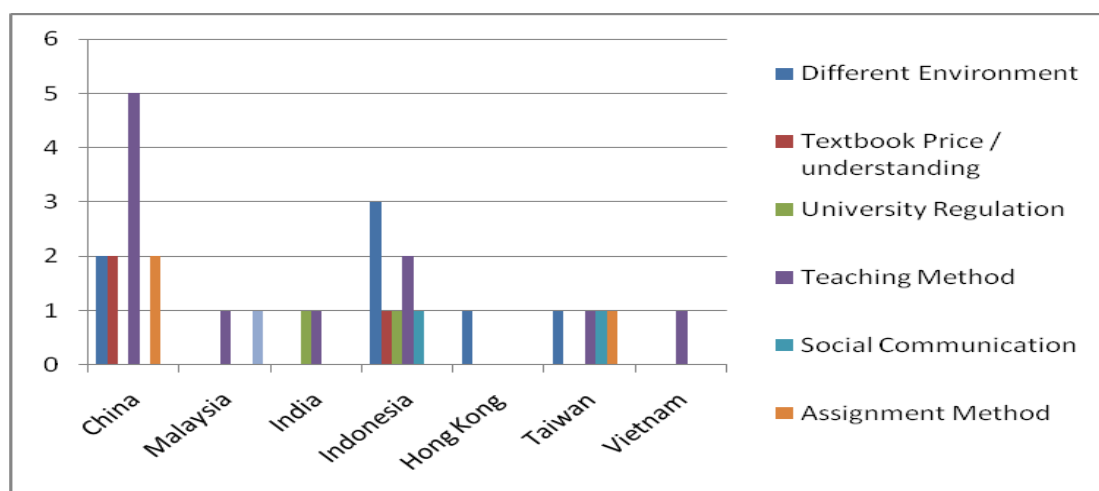


Figure 4.6 University of Technology Sydney undergraduate students: main differences

2) Main difficulties of international students studying in Australian universities

Of the 179 undergraduate students from the five universities, 66.67% said that social communication and language are the main difficulties they experience when studying in Australian universities. For example, one student from Curtin University states that it is hard to communicate with local students. There are 23 comments (41.07% from 56 comments from five different universities) from Curtin University which identify that social communication and language are the main difficulties.

Culture shock, cultural differences and adaptation are also significant difficulties experienced by students. One student from Southern Cross University states that he/she is confused by some cross-cultural problems, for example, the mutual understanding and the way of life. There are another 10 comments (55.56%) from a total of 18 comments with similar answers from students who studied at Southern Cross University.

There are other difficulties that students felt about study in Australia, such as assignment and exam difficulties, textbook difficulties and difficulties with teaching methods. Figure 4.7 shows the distribution of these difficulties experienced by international students within the five universities.



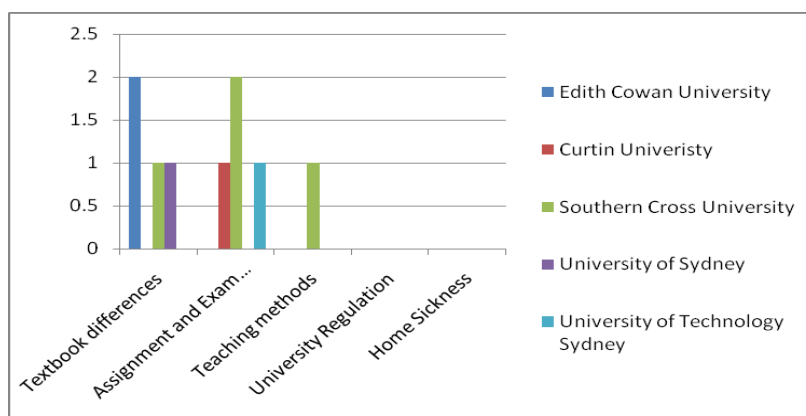


Figure 4.7 Textbook differences, assignment and exam difficulties, teaching methods, university regulation, and homesickness for undergraduate students

4.3.2 Postgraduate student data analysis

1) Main difference between the universities in their home country and the universities in Australia

In total, 204 postgraduate students from the five different universities gave answers to these open questions. Almost all of these postgraduate students received their first degrees in their home country and had come to Australia to complete Master degrees. The majority of them have been Australia less than two years.

About 57.87% of the total comments indicated that the main difference between the universities in their home country and the universities in Australia is in the teaching methods. For example, one student from China who studied at the University of Technology Sydney states that, "Less instruction, students need to study themselves, in my country just did what the teacher told". There are another 21 similar comments. In Edith Cowan University and Curtin University, there are 27 comments (19.85%) which said that the main difference is the teaching method, while Southern Cross University shows 17 such comments (12.5%) and the University of Sydney has 43 comments (31.61%). Figure 4.8 indicates the distribution of these comments. Basically, this point is the primary issue for students in all five universities.

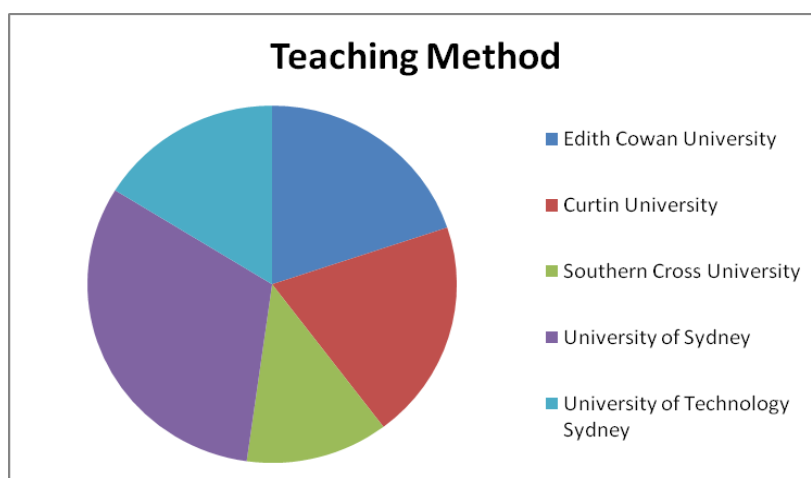


Figure 4.8 Main differences in Teaching Method identified by postgraduate students

The second main difference which postgraduate students feel when they study in



Australia is the environment (11.06%). There are 2 comments (7.69% from 26 comments) from students at Edith Cowan University, 3 comments (11.54%) from Curtin University, 4 comments (15.38%) from Southern Cross University, 6 comments (23.07%) from the University of Sydney and 11 comments (42.3%) from the University of Technology Sydney. Figure 4.9 indicates the distribution of these comments.

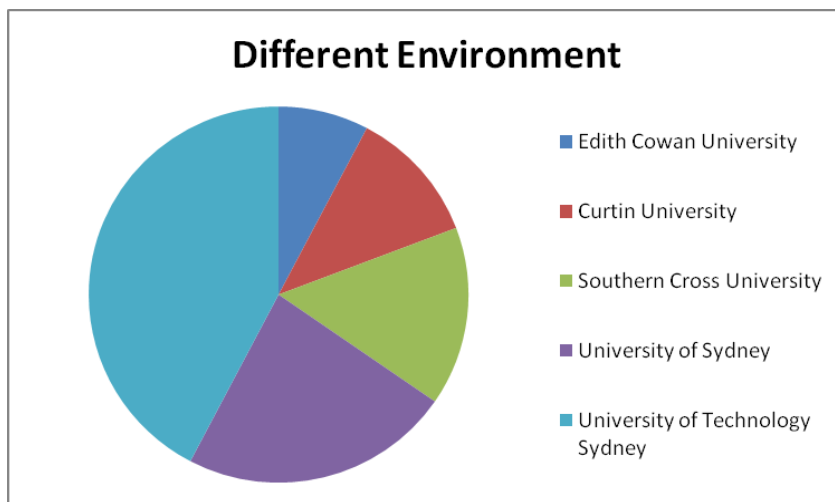


Figure 4.9 Differences in Environment indicated by postgraduate students

The textbook-related issue is also one of the main differences (19 comments from five different universities (8.08%)). Many students from the University of Sydney claim that textbooks in Australia are very expensive, as can be seen from 6 comments (31.58%) given by students.

Students also feel that the assignment methods in Australia are very different from their home countries. This can be seen from 19 comments which postgraduate students gave in response to the question.

The 3 other main differences that students consider to be main differences are social communication (16 comments), university regulation (13 comments), and cross-cultural differences (6 comments). For example, one student from the University of Sydney states that language differences sometimes lead to misunderstanding in communication. There are 4 other comments (25%) from students who study at Edith Cowan University, 3 comments (18.75%) from Curtin University and 9 comments (56.25%) from the University of Sydney which explain the social communication differences between the students' home countries and Australian universities. For university regulation, there are 6 comments (46.15%) from Edith Cowan University, 3 comments (23.08%) from Curtin University, 2 comments (15.38%) from Southern Cross University, and 1 comment (7.69%) each from the University of Sydney and University of Technology Sydney in relation to this issue. For cross-cultural differences, there are 2 comments (33.33%) from Curtin University and 4 comments (66.67%) from the University of Sydney. Students from the University of Sydney state that there is a big culture gap between Australia and their home countries. Figure 4.10 gives more details about these differences.



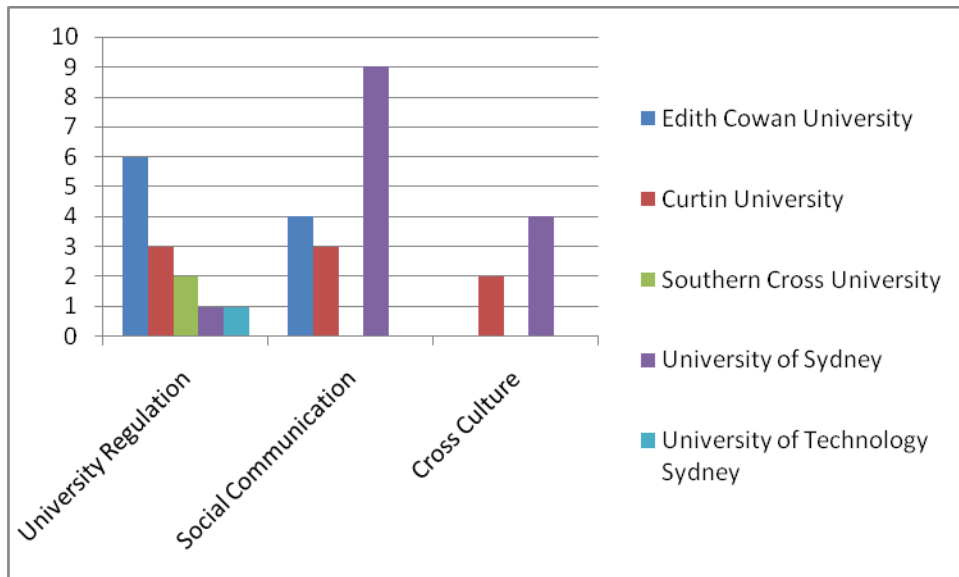


Figure 4.10 University regulation, Social communication, and Cross-cultural differences

2) Main difficulties of international postgraduate students studying in Australian universities

Of the 204 comments made by postgraduate students from five different universities, 67.57% of them said that social communication and language are the main difficulties experienced when they study in Australia. For example, one student from Southern Cross University argues that there is some difficulty in exchanging opinions with other countries due to English language problems. Many students feel that social, communication, and language issues are the most significant difficulties they have. Figure 4.11 shows the distribution of these comments from the five universities.

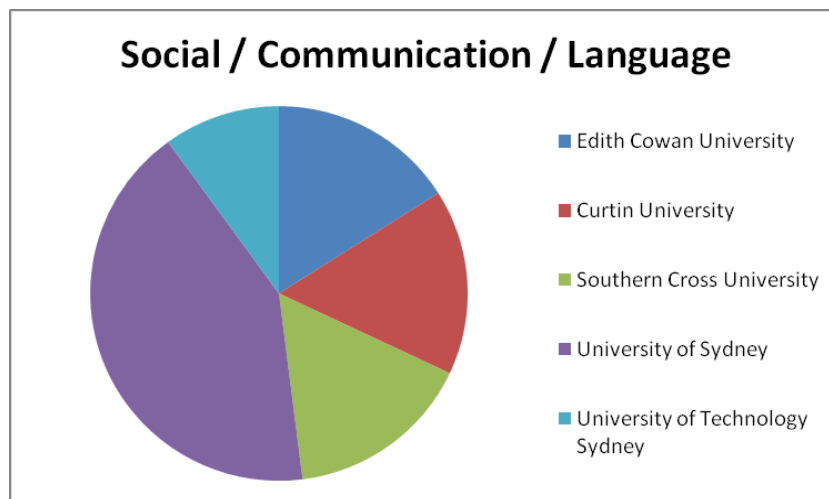


Figure 4.11 Social / Communication / Language for postgraduate students

Culture shock, cultural differences and adaptation are also major difficulties experienced by students. One student from the University of Sydney states that people from different cultures usually have little in common.

There are other difficulties that students feel when they study in Australian universities such as assignment and exam difficulties, university regulation, teaching methods, and homesickness. For example, one student argues that he/she could not fully master one subject because 14 weeks for one semester is too short. Some students also felt that the teaching methods in Australia present difficulties. For



example, one student said that homesickness is a problem because there are fewer cultural activities in Australia. Figure 4.12 gives the distribution of student difficulties at the University of Sydney.

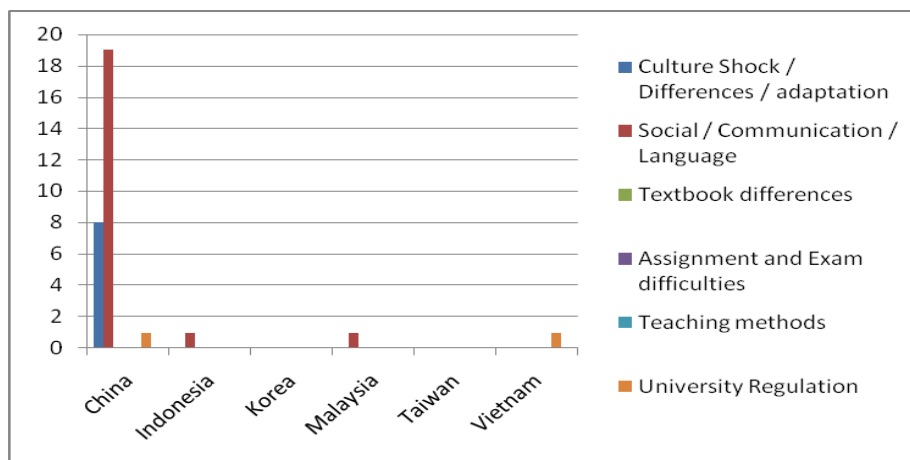


Figure 4.12 University of Sydney postgraduate student difficulties

4.3.3 Undergraduate and postgraduate student data analysis summary

Figure 4.13 shows the main differences identified by both undergraduate and postgraduate students in the five universities. The differences of the two distributions are almost same.

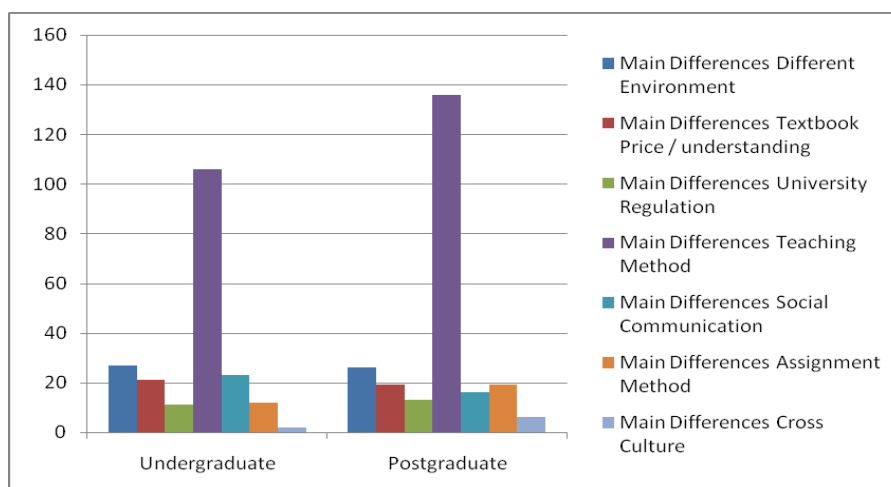


Figure 4.13 Comparison between undergraduate and postgraduate students: main differences

Figure 4.14 shows the main difficulties identified by both undergraduate and postgraduate students in the five universities. There are slight differences between the difficulties experienced by undergraduate students and postgraduate students during their study in Australia. Fundamentally, they all feel there are difficulties with social interaction, communication and language. Undergraduate students experience difficulty with textbooks, whereas postgraduate students have difficulties with university regulations and homesickness. One reason why undergraduate students have difficulties with textbooks may be because they did not use foreign textbooks when they studied in high school in their home country, only the books provided by the school. By moving to Australia to study at university for their



bachelor degrees, they are obliged to use many English-language books. On the other hand, postgraduate students, having studied toward their bachelor degrees in their home countries, have already used some foreign books as references besides their local books. They are therefore already familiar with using English-language textbooks.

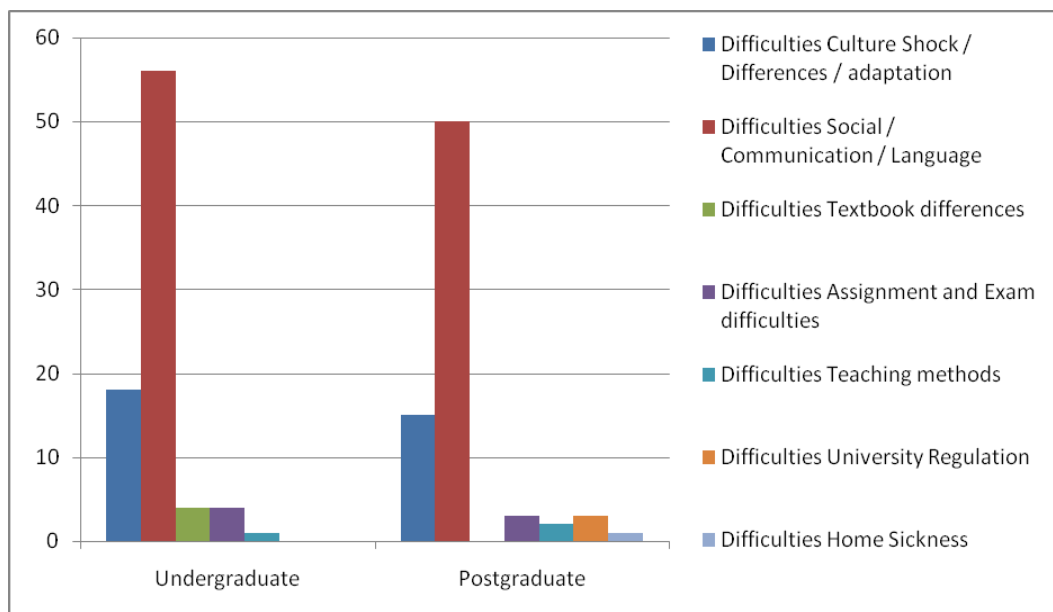


Figure 4.14 Comparison between undergraduate and postgraduate students' difficulties

In summary, this section analysed 1026 completed students' questionnaires across the five Australian universities. The analysis aims to seek students' opinions on textbooks (including lecture notes, tutorial questions, etc.), education management systems, learning methods, teaching methods (mainly class-based), assessments and communications. We used frequency, correlation and text mining methods to conduct the analysis. All main results have been reported in this section. A set of hypotheses have also been tested and reported in this section. These data analysis results will be used to generate findings and proposed guidelines/suggestions to students and staff in Australian universities.



5 Interview Data Analysis

This section presents the data analysis results from student and staff interviews in five universities. We first conduct an international student interview analysis in Section 5.1, followed by a staff interview analysis in Section 5.2, Australian local student interview analysis in Section 5.3 and graduates of Asian background interview analysis in Section 5.4.

5.1 International student interview data analysis

A total of 23 students participated in the interview.

5.1.1 Teaching contents and textbooks

(1) Do you have any difficulties in reading textbooks?

There were 20 international students who said that their main difficulty in reading textbooks was an English language problem. Because of their limited vocabulary, they had to spend a lot of time looking up words in the dictionary. For example, one student said that *“I think my main difficulty in reading the textbook is because my first language is not English. I find it hard if it is very sophisticated words”*. Only three international students had no difficulty whatsoever in reading textbooks.

(2) Do you think reading the textbook is very important to your study?

There were 13 students who thought that class and lecture notes were more important than textbooks because it was easier to extract the key points from class and lecture notes. For example, one student said, *“The lecture notes and study guide are more necessary to me, because the contents from the lecture notes are the key points that are summarised by the lecturers”*. Three students held the view that they are equally important. Three students said that classes and textbook are more important than lecture notes because lecture notes do not contain enough information.

(3) How many hours are spent in reading textbooks per week?

There were 2 students who spent less than 1 hour per week, 8 students spent 1 – 5 hours, 2 students spent 5 – 10 hours, 6 students spent 10 – 15 hours and 2 students spent more than 20 hours in reading textbooks per week.

(4) What do you do when you can't understand your textbooks?

Students who had difficulties reading their textbooks solved the problem in different ways. More than half of them would seek help from classmates and teachers, and one third of them would use the internet or dictionaries to solve their problems.

(5) What constitutes a good textbook?

There were 8 students who thought that a good textbook should have enough case studies and examples. For example, one student said, *“I personally like the book that gives definitions, and tries to explain and give examples, like case studies”*. Eight wanted textbooks with simple language that were well-structured. For example, one student said, *“You have to have one that uses more common language and not jargon. It has to be structured well and the most important thing is common language”*. One student needed textbooks with clear guidelines.

(6) What do you learn most from a textbook?

There were 10 students who thought that theory and concept from textbooks are very important to them, while 4 students preferred examples. Five of the international students thought that reading textbooks could improve their writing skills. For example, one student said, *“I learn the grammar and writing style, how it*



uses its academic words. It helps improve my language". One student said that he learned key information on the subject from textbooks.

(7) Do you think it's important that a textbook emphasises theory?

There were 13 students who thought that textbooks should emphasise theory, while 6 students believed that both theory and practical examples should be emphasised. One student said it should vary according to the degree. He said, *"It really depends on what subject you are studying and what level of study you are doing. If you are just doing a Bachelor Degree in simpler subjects then theory can be quite daunting for your students but if you are at post-graduate level doing research, then theory is important"*.

(8) Do you think reading the textbook is a very important learning exercise?

There were 14 students who thought reading the textbook is very important for their learning. For example, one student said, *"Yes at all levels. Undergraduate is even more important. Before you go to class you are supposed to read your textbook otherwise you will not know what is going on"*. Four students said this should depend on whether the textbook has enough practical examples. Three students said reading the textbook is not important.

5.1.2 Teaching and Learning Methods

(1) Which teaching methods have you come across that you find are most effective?

Students' answers to this question varied significantly. We can summarise that good teaching methods must pay attention to the interaction and communication between lecturers and students. For example, one student said, *"I think it is the best when the lecturer explains to the students and gives them a chance to understand. Practice in class is very important to do every week, I know it takes a lot of time but it is very important to us. I think we need to review our work in class too as that is very important to students"*. Another student commented, *"I think when the lecturer is just saying what is on the slides then it's boring. I also don't like presentations"*.

(2) Can you tell me which teaching methods you have come across are the least effective?

Once again, students' answers to this question varied. For example, one student said, *"I think when the lecturer is just saying what is on the slides because students can read it by themselves; we don't need someone to read it for us"*. Another said, *"The least effective teaching method for me is class discussion as I do not like speaking too much in class"*.

(3) Do you think that there should be different teaching methods for Australian and international students?

Four students said different teaching methods should be applied to local and international students. For example, one of them said, *"Definitely yes, because they are so different"*. However, sixteen students said it is unnecessary. For example, one of them said, *"I don't think so because the international students should have the same method because they can then learn more"*.

(4) Do you ask many questions in class?

Five students said they often asked questions in class. For example, one student said, *"Yes, I do... If I need the teacher to clarify, I will ask, or if I have a different opinion to the teacher I will..."* Twelve students said they don't often ask questions in class, for example, one of them said, *"I do not like to ask any questions, because in general Chinese students prefer to keep silent in class ..."* Three students said it depends on the topic: they will ask questions if they are interested in it.

(5) Do you think that students should be given more opportunity to ask questions in



class?

Eight students thought students should be given more opportunities to ask questions in class. For example, one of them said, *"Every student should be given opportunities if time allows"*. Ten students think that they have already had enough time to ask questions. They do not need more. For example, one of them said, *"No we get plenty of opportunities, but many of the international students are too shy to ask"*. Two students said they do not care about the opportunities to ask questions.

(6) Do you think it is important that students should actively engage in classroom discussions?

Nineteen students thought it was important that students should actively engage in classroom discussions. For example, one student said, *"I think so, international students need encouragement to participate though as they are a bit shy"*. Only one student said it is not important to him.

(7) Have you been involved in many group assignments since you started your course at this university?

There were 18 students who had had many opportunities to do group assignments. However, one of them said, *"There were opportunities to do group assignments, but I chose not to do it"*. There were only two students who never had group assignments. One of them said, *"I did not do any group assignment before..."*

(8) Do you prefer to choose your own group members or do you want the lecturer to assign them for you?

Sixteen students wanted to choose group members by themselves. For example, one of them said, *"We want to choose someone who is known well by us ..."* There were only 4 students who wanted the lecturer to assign group members for them. For example, one of them said, *"I think the lecturer should choose the group ..."*

(9) Would you like to have more group assignments? Or do you think there were too many?

There were 11 students who thought that they had enough group assignments and did not need more. For example, one of them said, *"Only one group assignment in a unit because the group assignments take a lot of time"*. Four students wanted fewer group assignments. For example, one of them said, *"I do not want the university to provide me any chance to do a group assignment"*. Four students would like more group assignments. One of them said, *"I feel it is necessary to do more group assignments ... I felt group assignments are very necessary to students, before they work in a social environment"*.

(10) What problems have you encountered in group assignments?

The answers to this question varied a great deal. Some respondents thought that cooperation was hard in group assignments. For example, one student said, *"... we are not getting to do them with others and sometimes a team member does not work well and the others have to do most of the work and contribute more"*. Another student said, *"The problems involve the time organisation, differing people personalities, and the problem of language communication"*. One student worried about the language problem, saying *"The language is the main problem"*.

(11) Do you think you get better results in group assignments than in individual assignments?

There were 5 students who said they would get the same results regardless of individual or group assignments. Four students said it should depend on the group members. One of them said, *"It depends on the quality of your group ... nice and responsible, you will get better results ... not diligent, you may get lower marks"*. Nine students thought that they could get higher marks when doing group assignments. For example, one student said, *"So far, yes. We haven't had any conflict with group assignment; we have been able to overcome all problems"*. Only



one student said he could get higher marks by doing an individual assignment.

(12) Do you think that group assignments are a good thing for your learning?
Eighteen students thought group assignments were good for their learning. For example, one student said, *"Yes because we also need to learn to solve conflicts in our team and learn to work with people and that way we learn to work as a team"*. Only one student did not agree, saying *"I do not think I can learn too much from group assignments, and they are not necessary. If I did a group assignment, different people are appointed to complete different sections. Therefore, I find group assignment not very useful"*.

(13) Have you done many presentations since you started University?
There were 17 students who had done some presentations. One of them said, *"Yes and all the presentations have been done in English"*. Only three students had never had any presentations. One of them said, *"No, not yet ... The accounting course is more about theory and accounts calculation, so I did not have opportunity to do a presentation"*.

(14) Do you like giving presentations?
Thirteen students liked giving presentations. One of them said, *"Yes, because in order for you to present you have to understand it very well, not only what is on the slides but what is behind the slides you have to know think it is a good exercise for students"*. However, 7 students did not like presentation. One of them said, *"Even if I had a chance to do a presentation, I did not want to do it, because my personality is quite shy and I do not want to talk in public. The second reason for not wanting to do presentations, because I am not a very confident public speaker, and I feel my English is not good enough"*.

(15) What are the main problems you have with presentations?
The answers to this question varied. Some students felt that language was a big problem; one student said, *"To sum up, at first, the language is the main problem with my presentation"*. Others felt that the problem lay in not having the right technique; one said, *"I think the main problem is learning how to make the slides more interesting ... it is difficult to manage the time"*. Some students felt nervous and one of them commented, *"Secondly, my personality is another main problem with my presentation"*.

(16) Do you like to work with other international students as a group?
Four students preferred to work with local students. For example, one student said, *"I prefer local students because most international students are lazy"*. Eight students preferred to work with international students. One of them said, *"Yes, because we can learn about a culture"*. Four students said they do not care. One of them said, *"It depends ... For me, the greatest thing is the personality"*. Only one student preferred to be in a group with mixed international and local students. He thought that international students are funny and interesting, but local students have some study methods and are familiar with local news and social knowledge.

(17) Do you think that the group will achieve better or worse results if some or all of the group is made up of international students?
Two students thought they would get a worse result if they worked with international students. One said, *"Probably worse"*. Nine students thought it depended on the capacity of the group members. One of them said, *"If they have good working methods and a hard working personality, then it's fine"*. Four students said they could get better results. One said, *"Yes, I think that I will achieve better results, if I can get good group members"*.

5.1.3 Education Management System



(1) Did you have any difficulty selecting your subjects, for example your major, minor or electives?

Nine students said they had some difficulties in selecting their subjects. For example, one student said, *"Yes, when I first came here. I don't know what unit I should enrol"*. In contrast, ten students said they did not have difficulties. One of them said, *"I didn't because all of my subjects were set for me before I came here, there were a pre-set group of units I that I had to do"*.

(2) Are you familiar with the university's referencing system?

Sixteen students were familiar with the referencing system. One student said, *"Now I am familiar. It is important to use end note, if you don't ... it is a whole lot of trouble"*. Five students were not familiar with the system. One of them said, *"No, I am not. I never saw it in China before ... but cannot master the whole system"*.

(3) Are you happy with the way the credit point system works?

Eleven students were satisfied with the credit point system. One of them said, *"Yes, I am happy with the way the credit point system works"*. Four students did not have special feeling about the system. One of them said, *"It doesn't matter to me. We used a similar system in my country"*.

(4) Where do you normally do your study? Why?

Fourteen students usually studied at home. For example, one of them said, *"I normally study at home, because there are no people to disturb me at home, whilst I study"*. Four students usually studied at school. For example, one student said, *"In general, I studied in the library because I feel that there is good study atmosphere"*. Three students studied both at school and at home. One student said he spent half his time studying at home, and the other half in the university's library. He would choose to study in the library when he couldn't concentrate very well at home. Sometimes, he would study at home if the library was too crowded.

(5) Do you spend more time studying on campus or do you spend more time studying at home?

One student said he spent half of the time on campus. He said, *"I think half of the time is in the campus, because both studying in the campus or at home have advantages and disadvantages"*. Nine students said they did not spend much time on campus. One of them said, *"Now that I'm doing my Masters, I only come to uni to get information from the internet"*. Eight students said they spent much time on campus. For example, one student said she spent much time on campus, as her home is close to the university, but even if she had not been living very close, she was still willing to study on campus.

5.1.4 Language

(1) Would you say that language was the main problem when you started your study in Australia?

All of the international students agreed with this. For example, one of them said, *"Yes, I had big problems. Although we passed an IELTS test ... But when I came here, I can not use English properly in unfamiliar situations ... Even now I still have language problem"*.

(2) What is the main issue with English? Reading? Understanding? Writing?

All of the students said they had English problems, although their problems differed. Collectively, they had difficulties in reading, understanding and writing. One of them said, *"I think, except reading, all other areas I have problems with"*. Some of them have only one problem, such as *"Mainly it is the listening"*. Some students had difficulties in writing: *"For me, at first I found that writing was difficult"*.



(3) Do you find it hard to communicate with your lecturers/fellow students in English?

Thirteen students said they did not have problems in communicating. One of them said, *"I don't think I have problems communicating with lecturers"*. Ten students said they still have some problems. For example, one student said, *"Yes, I always feels envious, because I can't speak good English"*.

(4) Do you still prefer to speak your own language to your fellow students whenever there is opportunity?

There were 7 students who preferred to speak English. One of them said, *"... I will reply them by my own language. If they chat with me by English, I would reply by English"*. Eleven students preferred to speak their own language. One of them said, *"I prefer to speak my own language to my fellow students ... because it is easier to communicate via my first language"*.

(5) What assistance has the university provided to help you with your language problem?

Students said they could get help from different sources. Some students had a special person to ask for help, for example, *"There is an officer who helps us correct our grammar"*, one student commented. Some students would ask local students to help: one student said *"but I prefer to practice with my Australian friends"*. Some students sought help from university organisations: *"The learning and teaching centre had free workshops and so did the education Dept so I attended those"*. Some students found their own way to solve this problem, for example, one of them said *"... the English bridging course"*.

(6) Do you believe the university has done enough to help you with your language problem?

Seven students thought the university had done enough to help them with their language problem. One of them said, *"I believe they have done enough, and tried their best. I remember in my first trimester here the ... tried to help us as new international students here by asking Rosemary to teach us more about the language"*. There were 8 students who thought the university had not done enough to help them with their language problem. One of them said, *"Not really because I came here as a final year student so I don't know"*.

5.1.5 Culture-based Teaching and Learning Concepts

(1) Apart from language, what were the main study difficulties you encountered in 1st year?

Students had different answers to this question. Some of them admitted that cultural difference was a problem. *"I felt the culture difference is the main problem to me"* and *"Culture a little bit..."* Others thought there was culture shock: *"I think that I did not get used to the Australian study way... I worried about those things. I don't have any problem with Australian culture"*. Some of them couldn't get used to the teaching method, as shown by these comments: *"... that case, I think finding material for assignments"*; *"the lecturer should help us when we did our group assignment"*; *"the university could have an induction class for the first year students to teach you how people teach here and what the expectations are"*; *"the Western style of writing, in China it is a different style"*.



5.2 Staff interview data analysis

A total of 10 staff members participated in the interview.

5.2.1 Teaching content and textbooks

(1) Do you set specific readings for your students?

Among the answers, only one teacher's answer was "very rarely". The other lecturers gave specific readings or reading guidelines to students. These comments show some typical methods of setting specific readings:

"Yes, of course. In the study guide there are a number of readings, and I try and integrate those readings into the activities and so the only reading material I provide is the essential reading..."

"We do issue study guide notes plus readings which are very large..."

"In our study guides there are specific readings set for each week..."

(2) Do you check that your students are up-to-date with their readings?

Nearly all lecturers checked whether or not the students were up-to-date with the readings, but they checked in different ways. Some lecturers had plans to do this; for example, one lecturer said, *"We do, we have weekly discussions and the students have to come to class prepared for those discussions"*. The other lecturer commented, *"They have to be up to date to do the assessment"*. Some lecturers did not have a plan; one lecturer said, *"No, I don't check them, I can tell as they usually don't understand what you are talking about in class if they haven't done them"* or *"I give students a question in class..."* One lecturer said, *"Only if I am dealing with post graduate students in a semi-supervisory type role but not with classroom oriented teaching"*.

(3) Do you quiz your students on the content of the textbooks?

Most lecturers did not use quizzes to check whether their students were up-to-date with their readings. One commented, *"however most of the ones I deal with are not really that way inclined so the short answer would have to be no"*. A few teachers used this method occasionally; one of them said, *"Occasionally we have quizzes as well"*. Only one lecturer definitely did this, but he commented, *"It was running last semester and not running this semester"*.

(4) What were your observations in terms of student use of lecture notes and references?

All the teachers believed that students use lecture notes, but the specific details of their observations were different. The following are some of the comments:

"They use the lecture notes a lot more than they use the textbook."

"I'd say the majority of them don't but they might work their way through the lecture notes while they are in class. The feedback is that they find them good, but they don't tend to be prepared."

"The students tend to want it easy and they tend to only want to use the lecture notes.... My observation is that students if they can 'not' do the work, they will 'not' do the work."

"I find the students love the PowerPoint..."

Lecturers seemed dissatisfied with the students' referencing. One of them comments *"I'm disappointed with the referencing skills of the students in general. I often find that students submit their work without proper referencing"* and another commented, *"I'm very tough on referencing ... I had one student who I referred to the head of school over referencing. He had actually copied a lot of material from a website and it was un-cited material"*.

(5) What constitutes a good textbook?

It appears that lecturers from different fields of study focus on different categories of textbooks. The comments are as follows:



"In an IS textbook you probably want something that is non-technical that has a business focus."

"As a lawyer a good textbook should cover pretty well the material that you want to deal with in class. It shouldn't be too easy..."

Some lecturers paid attention to the content, but the requisites were different. Some of them liked up-to-date materials; one said, *"Well a good textbook has contemporary material in it, up to date, which covers the current material and the discipline"*. Some of them like theories: *"... a good general overview of all the theories associated with the subject ..."* and *"I think a good textbook has a strong combination of sound theoretical basis and also one that isn't Australian centric"*. Some of them liked both theories and practice *"... theory of the subject that has to be given primary place, then of course the methods of solving the problems and applying the theory ..."* Some paid attention to the language issues: *"I like a textbook that is consistent with its language, so if it repeats a concept (term) in more than one chapter"*.

(6) What do you expect your students to get out of reading the textbook?

All the lecturers expected students to use textbooks to support their understanding of the subject, but they explained it in different ways. The following are some comments:

"Perhaps a little bit of back up to the lecture notes, filling in the blanks."

"The basic theory of the topic. The classes are very much about practical application of the theory."

"Understanding!"

"I expect them to use the textbook as a way to increase their learning and their educational experience."

"A student coming to class having read the textbook is going to get more out of the lecture because they will have a basic understanding and will be in a better position to discuss and question during the class."

(7) If you do choose a textbook, do you often choose a textbook that emphasises theory?

Lecturers had different opinions on this issue and differed mainly due to their particular area of study. Five lecturers gave negative answers; for example, one of them said, *"Not generally because the theory in my subject area tends to be extremely mathematical and students can't be assumed to have that kind of background"*. Some lecturers believe it depends on the situation: *"In some instances"* and *"It depends on the complexity of the theory"*. Only one lecturer gave a positive answer, which was, *"Yes, yes! Of course... It's got to have a sound theoretical base in it but it also has to be very readable"*.

5.2.2 Teaching and Learning Methods

(1) What teaching methods do you use in your teaching?

The lecturers mostly used a combination of different teaching methods. Here are some of their comments:

"I do use a combination of... inviting questions, a small amount of discussion and..."

"Everything; lectures, talking, asking questions, inviting students to speak to me and a few little jokes here and there."

"... I generally break it down into parts and so, the first section is probably about an hour of the lecture... and after that we will do some tutorial exercises and case studies. I might have the students do presentations. It varies from week to week depending ..."

Some lecturers just gave definite answers of focusing on one method; for example one of the comments was, *"Experiential, a lot about work, a lot of discussion work"*, and another, *"Certainly in terms of the amount of time they spend, most of it is laboratory based"*.



(2) Do you think that the methods you use are effective?

Nearly all of the lecturers thought so, but they came to that conclusion in different ways. Five of them were based on their own understanding; for example, one of them commented, *"I think they are"*. Another lecturer observed, *"Well they seem to think so"*. Two of them gave answers like, *"I tend to get good teaching feedback from the student feedback forms but I like to find ways of perhaps talking to other lecturers or talking directly with the students"* and *"I think you have to look at your student group"*.

(3) Do you think different teaching methods should be applied to local and international students?

Most of the interviewees did not agree that different methods should be used for local and international students. The comments are as follows:

"I don't think we could employ two different styles or two different methods."

"I think it would be better if we were able to provide all students with a similar product... the basis of every student education is very good."

Some said "definitely yes"; for example, one commented, *"Yes, because I have both in class and more international students and they all enjoy it"*. One lecturer made their comment like this: *"I think only to the extent..."* However, whether or not they agreed on different teaching methods, they explained that they had noticed the differences between student categories and tried to make up for it. One lecturer disagreed with this and commented, *"But, I would like to see us try and improve on that"* and *"some of these students, especially the Chinese students, are very shy to talk, so I'll deliberately put them in groups with people from other parts of the world"*.

(4) Do you think international students adopt very different learning methods than their Australian counterparts?

Most of the interviewees thought so. One of them commented, *"I do think they learn differently and approach it differently"*. Two lecturers disagreed: *"No, not in my classes. I've heard people say that, but, it's not been my experience"* and *"I don't think so; I think all students are pretty much the same"*.

(5) Do you encourage your students to ask questions in class?

Most of the interviewed lecturers did this; one comment was, *"Of course, although with the Masters Students I generally don't need to encourage them at all"*. Some lecturers did not answer the question directly; one comment was, *"I try and encourage self directed learning. I try to encourage interaction and student learning autonomy"*.

(6) Do you think it is important for students to actively engage in the classroom discussions in your teaching?

Most of the lecturers agreed on this. One lecturer commented, *"Yes, yes, yes!"* Two of lecturers responded "yes" but they had some other considerations: *"Oh, I think it is. But, again, I'm also conscious that for some people it is a bit daunting, a bit scary"* and *"Yes and no. Some students don't want because they are shy to speak in public, some cultures do not encourage that"*. One lecturer did not agree because of his subjects; he commented, *"If I were teaching a subject like management or things of that kind, very much so. In the area... I don't think it is a discussion-oriented subject"*.

(7) Do you set many group assignments in the subject(s) you are teaching?

Most lecturers answered that they did not set many group assignments. One commented, *"No, no! ... there'll be one good student and the other three will get the information from the one student doing all the work and not need to do the work themselves"*. One lecturer set group assignments for post graduate students, *"I do set a major group assignment for the post graduate students"*. Only one lecturer agreed; the comment was, *"All the time, every class"*.



(8) Do you think group assignments are important?

Four lecturers agreed that group assignments were important. One of them commented, *"It's good because you not only work on the discipline but you can show the difference between groups"*. Four lecturers thought it was useful to some extent; for example, one commented, *"Not necessarily in this subject but practical assignments are. The group assignment idea is good though"*. One lecturer totally disagreed, commenting, *"... use group assignments to minimise their marking load rather than for the educational benefits of their students"*.

(9) Do you let students form their own group?

Four lecturers responded 'yes'; for example, *"The students can organise groups themselves... if they like each other or are comfortable with each other"*. Some lecturers sometimes do so. One of them commented, *"Sometimes, what I'm looking for is a gender or ethnic difference"* and another remarked, *"Sometimes I let the students self-select their groups and sometimes I select the groups and mix them up a bit"*.

(10) What are the common problems within group assignment?

The most common problem that lecturers worried about was equity. One of them comments, *"The major problem is the hard workers versus the free loaders... we can't distinguish between both of them they all have to get the same marks"*. One lecturer thought they don't do assignments properly and can't get any benefit from group assignments. He commented, *"... they were just working individually and putting the four pieces together at the end of semester in a single document and in different fonts half the time! So there is just no point"*.

(11) Do you think international students do better or worse in group assignments?

Three lecturers thought that international students were no better or worse in group assignments. One commented, *"I haven't noticed a substantial difference between them"*. Four of them answered that it depends on the students; for example, one said, *"It depends who is in their group"*. They also mentioned some culture-related concerns, for example:

"If we were marking grammar I would say that the international students would not do so well".

"I had a Muslim woman once and so she felt uncomfortable dealing with men in that group".

(12) Do you often set presentations as part of the assessment in your teaching?

Five of them gave positive answers; for example, one commented, *"Yes, I do ... and the emphasis is on making it a communication exercise"*. Two of them did not give direct answers, instead commenting, *"Because of the second language issue ... Can they understand it, do they understand it and can they use it? That's the point – can they use it effectively"*. Two lecturers disagreed; one commented, *"No....Because it is a waste of time"* and the other commented *"No. ...they have to manage a small group discussion one time during semester but I don't agree with doing presentations... It is not an equitable playing field"*.

(13) Do you think presentation is important to students' learning?

Seven lecturers answered yes to this question; for example, one commented, *"Very important – that's a skill that any person with an MBA has to have"*. Another remarked, *"I think that depends very much on the need to communicate the subject to one's peers"*. Two lecturers did not give a definite answer; one of them said, *"Eventually, for me, because I can get them to deal with presentations the way I like it, but I'm not a stickler, I don't insist that they do it my way"*.

(14) What are the common problems with student presentations?

The answers to this question varied amongst the lecturers. Three believed that students suffer from lack of confidence; one commented, *"A lack of confidence; that*



is the biggest problem". One lecturer mentioned the language issues: *"one of them is the inability to express in the local language"*; another lecturer mentioned the cultural issues, saying, *"for one it's culture. ... Chinese are rather shy and often don't like speaking out loud ... they don't like speaking English in front of fellow Chinese students who have good English, depending on where they come from and how good their English is"*.

(15) Do you think international students do better/worse in presentation?

Some lecturers believed that international students have language and culture disadvantages in presentations. One comment was, *"The international students generally tend to come across less effectively partly due to their language problems"* and another, *"As I said, it's the shyness and the embarrassment – the better the English the more likely they are to talk or to present"*. One lecturer found that it was case by case: *"It depends, I've found Indian students to be more confident in talking, not all of them"*. Only one lecturer believed that there was no difference in presentation, *"Generally speaking I don't really see a big difference"*.

(16) Do you think it's a good idea to mix local and international students in a group?

Four lecturers totally agreed on this; one of them commented, *"Absolutely! Yes. It's a cultural experience"*. Three lecturers answered that it depends on different situations; for example, one of them commented, *"it depends on whether the differences harmonise and complement one another or whether the differences clash"*. One lecturer commented, *"I encourage them to do that because they learn a lot more by doing that but I don't enforce that"*. Only one lecturer totally disagreed; he commented, *"No. There is too much resentment if you do"*.

(17) Do you get many complaints from local students that they don't want to be in the same group as international students? If so, what were the main issues?

All except one of the lecturers responded "no" to this question. This lecturer commented, *"Yes so we talk about some strategies to overcome that..."*

(18) Do you generally have more problems with groups that comprise both local and international students?

None of the lecturers had more problems with the local and international students mixed groups. A couple of comments were: *"I haven't noticed that"*, and *"No, I don't mind that because as I said earlier..."*

5.2.3 Education Management Systems

(1) Do you feel international students have more difficulties in selecting subjects and major/sub-majors by themselves when they first start their university study?

The majority of the lecturers did not have this kind of experience; as one commented: *"Well my experience in that is of course very limited"*. Only two of them gave answers and suggestions; one commented, *"Quite often I find that international students have more difficulty comprehending an elective"*, the other commented, *"Yes, I think international students need more advice in the beginning"*.

(2) Do you feel international students have more difficulties in understanding the credit point system than the local students?

The majority of the lecturers did not know about this; one commented, *"I haven't observed any significant greater difficulty in that however I am not in the administrative side of that"*. Three of them answered "no"; for example, *"No, they understand it, they know they pass, they get the points"*. Only one lecturer believed international students have this difficulty; he said, *"Yes, lack of the whole system, lack of the Australian system, lack of the university system"*.

(3) Do you feel international students have more difficulties in referencing than the local students?



Six of the lecturers believed that international students have more difficulties in referencing. One commented, *"Yes, definitely, yes!"* The other answers were not so direct; for example, one commented, *"I mean you do get the odd one here or there who is just trying to beat the system"*. Only one lecturer disagreed with this; he comments, *"No, I don't think so really because in law everyone has to reference..."*

(4) Do you feel international students have more difficulties in comprehending the university's policies on plagiarism?

The majority of the lecturers believed that international students have difficulties in comprehending this policy; for example, one of them commented, *"Certainly initially yes. Mind you there are some local students who have got that problem too"*. Another lecturer commented

(5) Do you feel international students are more likely to be involved in plagiarism?

With the exception of one lecturer, all the other lecturers agreed that international students are more likely to be involved in plagiarism. One comment is, *"Yes! ... 90% of the time international students are involved in those cases, unfortunately"*. The one lecturer who disagreed commented, *"Both domestic and international are all trying to come to grips with academic writing and referencing is a big part of that"*.

5.2.4 Language

(1) Do you feel that language is the biggest problem faced by most international students?

All of the lecturers felt that language is the biggest problem. One lecturer commented, *"Well depending on where they come from it could well be. For example the Singaporean students ... would generally seem not to have very much problem with English at all. Students from Vietnam and students from mainland China especially... from some of the Middle East countries, their language problems tend to be quite challenging"*.

(2) Do you feel many international students have difficulties in communicating with others in English? Prevent them from fully participating in class discussion?

Nearly all lecturers thought that many international students have difficulties in communicating with others in English. One of them commented, *"Yes I think a number of them do"*. But some of them believed that this was not major problem; for example, one commented, *"Firstly, yes, but if they are meeting together outside the lecture room or they're sitting near an English speaker they find it much easier than if they don't mix at all"*. Only one lecturer disagreed on this; he commented, *"NO, I don't think so. Once again if you have a safe learning environment in your class ..."*

(3) Do you think the language difficulties have a negative impact on international students' academic performance?

Most lecturers agreed that language difficulties have a negative impact on international students' academic performance; for example, one lecturer commented, *"I think it can, yes. Particularly if you have things like presentations and..."* But still a few of them disagreed and one of them commented, *"No. Not at all. I don't agree with any of this crap ... it's not their problem, it's our problem. We invite these people here, take their money, we admit them to the course, therefore, it's our job to help them"*.

(4) Do you give special allowance to international students' English problems when assessing their work?

Seven lecturers did overlook grammar and spellings in assessing international students' assignments. One of them commented, *"Yes, the allowance I give them is that I don't take marks off ... in terms of the content, the validity of the content or the focus of the content, but I don't take marks off because they haven't spelled correctly"*. Three other lecturers insisted that they must be satisfied; one of the



comments was, *"No, I send them to Rosemary Graham or Jenny and ask them to work with them until their assignment is up to a certain standard"*.

(5) How can the University help those who have English problems?

Half the lecturers believed that the university should have rigid entrance criteria to solve the problems; one comment was, *"In the first place by being a lot more selective in terms of the students that the university takes in"*. The other half suggested that the university should use their assistance unit to help international students; one comment was, *"...but I know with undergraduate students we refer our students to Rosemary Graham for assistance with their writing, etc."*.

5.2.5 Culture-based Teaching and Learning Concepts

(1) Do you think international & local students face a different set of study difficulties in their 1st year? Can you please list them?

Four lecturers replied "yes" to this question; one of them commented, *"Yes, local students don't generally have a culture shock"*. The rest of lecturers think that in the first year, both local and international students are faced with the same difficulties; for example, one of them comments, *"I think that the problems that are faced are probably across all of them but they are hugely increased with the international students"*.

(2) In your opinion what can the university do to help 1st year international students to have a better start in the new learning environment?

Some of the lecturers thought that the university should do more to help; one of them commented, *"I think that we definitely can be as influencing as possible in our own orientation and welcome them as much as we can"*. Another said, *"I think maybe giving students more pre-warning about what they will experience when they get here"*. Some of them thought students could get help from their friends; one comment was, *"one of the ways they could do that, is that if they've got a student like yourself who's been here for a while, is maybe a quick presentation to address their cultural group, like a mentor"*.

5.3 Local students interview data analysis

A total of seven local students participated in the interview.

5.3.1 Teaching Content and Textbooks

(1) Do you have any difficulties in reading textbooks?

As to the textbook reading difficulties for local students, only one local student said he has no problem. The remaining local students had different kinds of difficulties: some find it hard to get useful information; for example, one comments, *"My biggest issue when reading textbooks is that there is never a simple answer to a question"*. Another student found it hard to understand, saying, *"Sometimes they can be very complicated terminology and very hard to understand"*.

(2) Do you think reading the textbook is very important to your study?

Three local students thought that textbook, lecture notes and class were all important. For example, one student said, *"I believe textbook use, lecture notes, and class study are all of equal importance when it comes to learning the content of the unit"*. Two students considered class and lecture notes were more important than textbooks. Only one student thought the textbook was more important. He said, *"Yes textbooks is vital for lectures if you don't understand something it can be further explained in the textbook ..."* One student thought the importance of the textbook would depend on different situations. He said, *"I think that textbooks can be of varying importance depending on the class....They tend to be more in-depth than the provided lecture notes"*.



(3) How many hours are spent in reading textbooks per week?

Five students spent 1 – 5 hour per week and one of them said if there was an assignment, he would spend 10 – 15 hours. Two students spent 5 – 10 hours per week.

(4) What do you do when you can't understand your textbooks?

The majority of the local students said they would find help from their lecturer, classmates, and the Internet if they couldn't understand the textbooks. For example, one local student commented, "I will go to the teacher and ask them to explain to me what the textbook means. If that fails to help then I go onto Google and look it up".

(5) What constitutes a good textbook?

Many students think textbooks should be clear and easy to understand. One commented: *"A good textbook is one that is easy to read and is easy to understand but still give you enough of the terminology to make sure that you are correct"*. Some students focused on specific details such as diagrams or theories; for example, one of the students said, *"with plenty of diagrams and explanations to simplify complicated theories/ problems"* and another student commented, *"A good textbook should have a good structure, have theories and explain them very well with case study and examples"*.

(6) What do you learn most from a textbook?

Local students believed that textbooks can provide deeper knowledge and help them understand theories. One student commented, *"A textbook teaches more in-depth theory than the unit study guide and unit PowerPoint slides, etc."*. One student also found textbooks useful in extending his vocabulary; he commented, *"textbooks broaden your vocabulary as well as your sentence structure and different ways of explaining thing"*.

(7) Do you think it's important that a textbook emphasises theory?

Three of the seven local students considered both practical examples and theory should be emphasised in the textbook. For example, one student said, *"Yes but I also believe it should focus on the practical side as well. Plenty of exercises and questions are essential to help a student understand their studies"*. Two students thought textbooks should focus on theory. For example, one student said, *"A textbook emphasises on theories is very important. Only when you understand the theory then you can apply them very well"*. One student said textbooks should be more practical than theoretical. He said, *"I think that practical is also just as good as you can see what the book is going on about but on the other hand the textbook theory is also good and can really help you to understand what is going on"*.

(8) Do you think reading the textbook is a very important learning exercise?

Six local students held the view that reading the textbook was very important. For example, one student said, *"Yes I do think that it is an important exercise because if you read about it and then place those theories into practice you can really get the idea of what the textbook is going on about"*. Only one thought that lecture notes were more important than the textbook. She said it was not a really important learning exercise for her, because she felt she could understand the subject well from the lecture notes and what the lecturer talked about in class.

5.3.2 Teaching and Learning Methods

(1) Can you tell me which teaching method(s) you have come across are the most effective?

There were no common methods that students considered were the most effective. Each student was fond of his/her own method. One student focused on being able to explain theory clearly, another student liked a lot of examples taught by the



lecturer, and one of them like the combined method. Following are some of the comments:

"The most effective teaching method I have come across is when the teacher involves the students with practical examples and helping to resolve a problem."

"The most effective teaching methods I have come across is when a variety of methods are used."

"Personally, for me I think copying down notes from lecture slides as well as supplementing that with additional information in lectures is the most effective means."

(2) Can you tell me which teaching method(s) you have come across are the least effective?

Only one student felt it was the least effective when the lecturer talks very fast and doesn't use original materials. All the rest of the students thought the least effective method was when the teacher just read their slides or lecture notes. For example, one student commented, *"The least effective teaching method is where they just sit there and read what they have placed on a slide"*, and another student commented, *"The least effective method I have come across is when the teacher just reads from their notes and does not involve the class at all"*.

(3) Do you think different teaching methods should be applied to local and international students? Why / why not?

There were three main groups of ideas. The first was that local and international students should be taught via different methods. One of them commented, *"Yes I do think...international students may have a bit of trouble to understand what they are going on about...when a teacher is using Australian slang...some teachers talk at a fast pace"*. The second group disagreed on different teaching methods between local and international students. One of the comments was, *"No I think the same teaching methods ... I have attended lectures where there are many international students and we all seem to learn quite well in the same environment"*. The third group also disagreed on different teaching methods, but they believed that more attention should be given to international students' language or culture problems. One student commented, *"In most circumstances I believe ... However if a language barrier exists then I believe different teaching methods should be implemented"*.

(4) Do you ask many questions in class? Why / why not?

Local students' responses to this question can be divided into several categories. The first group always asks questions; one student commented, *"Yes I do ask a lot of questions in class as I find it helpful to get the teacher to slow down ... so that I can get an idea of ... and also ...can also help others to also understand"*. The second group asks questions only if necessary; one of them commented, *"I do not regularly ask questions in class unless I am having a particularly difficult time understanding the basic concepts"*. The third group never asks questions in lectures; they prefer sending emails, asking during breaks or just leaving it until the tutorial; one of them commented, *"I study externally so if I have a question I e-mail"*.

(5) Do you think students should be given more opportunities to ask questions in class?

There were two groups of opinions. Four of the seven students thought they should be given more opportunities to ask questions; one of them commented, *"Yes I do think that they should be given more time to answers questions in class"*. The other three believed that they have had enough opportunities to ask questions in class. One commented like this: *"A student is already given plenty of opportunity to ask questions from the classes I have attended"*.

(6) Do you think it is important for students to actively engage in the classroom discussions in your learning? Why /why not?

All of the seven local students agreed on this; one of them commented, *"Yes I do*



think that students should get involved in classroom discussions as you can help each other ...and sometime you seem to get more out of the discussions that what you do in a classroom with the lecturer just talking and explaining things".

(7) Have you been involved in many group assignments since you started your course in an Australian University?

Four of the local students had done many group assignments, two of them had done a few, and only one of the seven students had never done any; he commented, *"No I have not done any group assignments"*.

(8) Would you like to have more group assignments? Or do you think there were too many?

The opinions can be divided into two main groups. The first group thought that group assignments are good, and they can learn from others and alleviate their assignment burden. One of them said, *"Yes because you can learn a lot from your peers as well as social groups can broaden"*. The second group thought that group assignments are enough; one of them commented, *"So far I think there is a sufficient blend of individual and group tasks. Any more and there would be too much dependence on others and a lack of individual rigour"*.

(9) Do you prefer to choose your own group members? Why / why not?

Four of the seven students liked to choose their own group members while one student did not like to do that, commenting *"No I would not like to choose my own team members... you will meet more people and you can see how different people act in a different group ..."* One student did not care whether he could choose or not.

(10) What problems have you encountered in group assignments?

Four students thought that it was unfair that some do a lot of tasks but others don't. One of them commented, *"Some people in the group not pulling their weight and relying on others to do all the work and get them good grades"*. Also there are cooperation problem within the group; one of them comments, *"Opinions are the biggest the one, how assignments are going to be handled finding a time that suits everyone and who is going to do what?"*

(11) Do you think you get better results with group assignments?

There are three main opinions. The first group of three students thought they could get better results; one of them commented, *"I think that you would because each person could work on the area that they can do best in and that way you would be able to get a better mark"*. The second group of three students thought the results would depend on the assignments. One of them commented, *"It depends on the sort of assignment. A verbal assignment would get me better grades in a group...Written I believe I do better by myself ..."* The third group had one student and he did not like group assignments.

(12) Do you think group assignments are a good thing for your learning? Why / why not?

Six out of seven students believed group assignments to be a good thing; only one student thought they were terrible. He commented, *"Group assignments can be great fun. They can also be terrible"*.

(13) Have there been many presentations since you started your course in an Australian University?

Only two had not had attended any presentation since starting their courses in Australia. One of them commented, *"I think there have been a few but I don't go to them"*. All the rest of them have attended some presentations.

(14) Do you like presentations? Why / why not?

Four of them hated presentations; one of them commented, *"I hate them, because I*



am a shy person I am not comfortable with standing in front of people", and another student commented, *"How well your presentation goes relies almost entirely on your performance"*. One student liked presentations, feeling that presentation allows her to communicate with classmates and express herself creatively. The remaining two students had mixed feelings; one commented: *"Yes and no. Yes because they can be very informative...No in the way that I do not like being the one that presents them to people"*. The other commented, *"I only like presentations if I am given some additional notes/hand-outs to read/write down important information"*.

(15) What are the main problems with presentation?

There were two groups. The first had one student who thought he had no problems unless it was a group presentation. The second group had six students and they had some different problems. One commented, *"I don't really have any problems with them; the only time I have a problem is when I am the presenter"*. Another commented, *"You may lose marks for your inability to present your knowledge well although you may have a sound knowledge of the topic"*.

(16) Do you like to work with international students as a group? Why / why not?

All seven local students said they had never disliked working with international students as a group. One commented, *"Yes I would like to do a group assignment with international students as it will help you in the way that you can get to see another culture..."* Another comment was, *"I have never worked in a group with international students, but I'm sure it would be fine"*. Two of them said they did not have the opportunity: *"I haven't had the opportunity to do so"*, and the remaining two did not mind.

(17) Do you think your group will achieve better or worse results if some or most of the members are international students?

The responses fell into three groups: positive, negative and neutral. Only one student felt that if the assignment was appropriate then there would be benefit, commenting, *"I think having international students could benefit the group depending on the assignment For example, I remember ... group assignment on world games... This group was given lacrosse, and the international student (who was from USA, actually played the sport) – the group did very well..."* Two of them felt negative; they worried about their language issues: *"Probably worse because there is a communication barrier so getting information across and reasoning is harder to explain and understand"*. The rest of them thought it didn't matter. One of them commented, *"I think the result would be the same as everyone is being shown the same information and therefore the result will be the same"*.

5.3.3 Education Management Systems

(1) Did you have difficulties in selecting subjects, majors, minor or electives when you first started your university study in Australia?

Five out of the seven students did not have any problems. Two of them had some problems, one thought there were too many choices, and the other had some difficulties in her first semester.

(2) Are you happy with the way the credit point system works?

Six out of the seven students thought it was good, the remaining one did not care about it.

(3) Are you familiar with your university's preferred referencing system?

Four of them knew about the university's preferred referencing system, and one of them commented, *"I have found that certain unit assessors prefer different referencing systems"*. The remaining three had some problems, and one of them commented, *"I have had problems with referencing in the past. I have found that different lectures ask you to use various referencing methods and this can be quite*



confusing”.

(4) Where do you normally do your study? Why?

Only one student sometimes studied in the university and sometimes studied at home. She felt that studying on the university campus was efficient. The other six students liked to study at home and one of them commented, *“The reason is it’s the most convenient place to get it done as it seem to be the best place”*.

(5) Do you spend much time studying in the campus? Why/ why not?

All seven local students liked to study at home. They only studied in university if they need to, such as when downloading or doing group work. One student commented, *“I was spending a lot of time at the campus as I was an internal student but at the moment I do not spend much time there at all as I am an external student I do not get the time to go there and I do everything through the computer for the best part of the time”*. One student commented, *“I only go there sometimes if I need to use a textbook or use their net to download something”*. One student commented *“particularly if I am participating in group study or group tasks”*.

5.3.4 Study difficulties

(1) Local students: what were the main study difficulties you encountered in 1st year?

All seven students had some difficulties, which can be divided into two categories. The first was that new students need time to get used to learning methods in the university as they are different from those in high school. One of them commented, *“University study is a lot different to high school, you are not pushed and you must rely on yourself to get in and get the work done”*. The second was that new students need time to get used to the teaching methods; as one of them commented, *“Referencing with textbooks, finding a balance with life and university as well as help from teachers”*.

5.4 Graduates interview data analysis

A total of 10 graduates of Asian background participated in the interview.

5.4.1 Teaching Content and Textbooks

(1) Do you have any difficulties in reading textbook?

Nine graduates had language problems when they read textbooks. For example, one graduate said, *“English is my second language, so sometimes it is really hard to find out the meaning of a word”*. Only one student has no difficulties. He said, *“I find I do not have too many difficulties whilst reading Australian textbooks, because when ... the lecturer chooses the textbooks, they take into consideration that this book would be useful to both local and international students”*.

(2) Do you think reading the textbook is very important to your study?

Eight graduates thought the textbook was very important. For example, one graduate said, *“It is very important. Many people find the examples really important. Before going to a particular exam you need to know something about the material, so the textbook and examples are really important”*. Two students thought it was not that important. One of them said, *“I do not think that the textbook is really important to me, I believe that the textbook is only a part of the idealistic reference material”*.

(3) How many hours are spent in reading textbooks per week?

One graduate spent two to three hours per week. Two graduates spent 5-10 hours per week on textbooks. Five graduates spent more than 20 hours per week.

(4) What do you do when you can’t understand your textbooks?



When they have difficulties in reading textbooks, one of them chose to consult a dictionary and ask lecturers. He said, *"The first thing I can do is to look at a dictionary and find the meaning by myself. If I still can't understand I will ask the lecturer, and they will give me information and help me"*. Another chose to get help from a learning assistant in the university. He said, *"I went to a 'Learning Official', she was very nice, and guided me how to read the textbook properly, do assignments, everything. ... sometimes I would ask my friends the meaning"*. Six of them chose to discuss with their lecturers and classmates. For example, one graduate said, *"I'd normally ask in the tutorial, or if I don't have a chance, I will ask another student, or wait and try to ask the lecturer after class"*.

(5) What constitutes a good textbook?

There were 6 graduates who thought a good textbook should combine theory and practical examples. For example, one graduate said, *"I am especially interested in the examples given in a book, real life examples and case studies. A textbook that focuses too hard on just theory is not very interesting, it can be boring."* One graduate considered picture and graph were essential parts of a good textbook. He said, *"When it has more topics, I like it to be easy to find keywords and have a simple structure."*

(6) What do you learn most from a textbook?

There were 4 graduates who thought that theory and concept from textbooks were very important to them. For example, one graduate said, *"I can learn most of the theory from a textbook"*. Two students prefer examples. One of them said he learnt a lot of examples that address real world case studies, and calculations. One graduate thought he could find some detail about the course from a textbook; he said, *"You learn the summary of your course from the textbook, and expand on that with lectures, internet and library material"*. One graduate said he learned key information about the subject from textbooks.

(7) Do you think it's important that a textbook emphasises theory?

There were 2 graduates who thought that textbooks should emphasise theory. Five graduates believed that both theory and practical examples should be emphasised. For example, one of them said, *"There is a bond between theories and exercises. You cannot separate those two processes as they are hand in hand"*

(8) Do you think reading the textbook is a very important learning exercise?

There were 4 graduates who thought reading the textbook was very important for their learning. For example, one graduate said, *"Yeah, I think so. Before I attend class I will read the relevant material quickly, and after class I will go over it again but more slowly, to fully understand those things"*. Three graduates said this should depend on whether the textbook has enough practical examples. For example, one graduate said, *"There are links between textbooks and exercise ... Although the theories from the textbook can sometimes guide you how to operate, when you are actually working, there are many differences between theories and learning exercise"*.

5.4.2 Teaching and Learning Methods

(1) Can you tell me which teaching method(s) you have come across are the most effective?

All graduates had their unique most effective teaching methods such as small group teaching, group discussion, tutorial, lecture note and PowerPoint materials, case studies and connections between lecturer and students. The comments were as follows:

"In my opinion, I feel that small groups ... Therefore, I prefer the tutorial method of teaching."

"PowerPoint is good for me."



"Case studies are most effective for me."

"Depends on what subject it is. For example if it is a practical subject, like programming, networking that we IT students do a lot. Practical exercise is the best way to learn. If it is a topic to answer, group discussion is the best."

(2) Can you tell me which teaching method(s) you have come across are the least effective?

Three of them thought the least effective teaching method would be a lecturer who just stood and read the lecture notes or PowerPoint slides. Another three thought that big lectures without communication were the least effective. One of them commented, *"The big lectures are the least effective to me, because the big lectures are the process that the lectures input all of knowledge to you and there is little chance to provide the student participation in the discussion"*. One graduate believed there was no least effective one, and he commented, *"I don't think there is a 'least one', because you should be able to gain from any method"*.

(3) Do you think different teaching methods should be applied to local and international students? Why /why not?

Seven of them thought that different teaching methods should not be applied.. One of them commented, *"I think the teaching methods for all students should be the same. Maybe lecturers need to pay more attention to speaking clearly so a whole class of international students can understand, but that is not a problem"*. The remaining three thought different teaching methods should be applied to local and international students. One of them commented, *"firstly, the lecturer should pay much more attention to the speed of speaking ... Furthermore... the lecturers should learn more about Asian economics and culture, and put those contents into ..."* Another comment was, *"Sometimes it's necessary to use different ways to teach...I think learning needs a little more advanced support for international students to give them more confidence with their English"*.

(4) Do you ask many questions in class? Why / why not?

Five of them said they did not ask questions in class. One of them could not follow well so he had no questions; the other four said they were too shy to ask. Their comments were: *"sometimes when the lecturers teach, I had no time to think it over properly due to my language problems ... so there was no chance to have the questions"*, and *"No, Not really. I am very shy. Sometimes I go to the lecturer directly to ask questions, but not usually in class....maybe it's more of a cultural thing, as well as the fact I'm shy"*. Three of them said they did ask questions in class. One of them said, *"Yes, I do ask some questions, but not too many. ... the culture difference..... If the students get a problem, they ask questions to their lecturers after the classes"*.

(5) Do you think students should be given more opportunities to ask questions in class?

Six of the graduates thought students should be given more chance to ask questions. The other two thought this was not so efficient; one graduate commented, *"Some students have an idea of what they want to ask but they have to do it clearly, but it takes time"*. Another student thought, *"If the lecture is small, there is enough time for lecturer to give students for question. But if the class is big, that's would not work"*.

(6) Do you think it is important for students to actively engage in the classroom discussions in your learning? Why /why not?

All of the interviewed graduates thought it was important. One of them commented, *"It will help the student to solve their studying problems if the students can discuss in the classroom. Some questions discussed in class, whether you understand or not, will help the students clearly to comprehend the discussed issue, and bring you up to date with the information"*.



(7) Have you been involved in many group assignments since you started your course in an Australian University?

Six of them had done a lot of group assignments, one of them had done only a few and one had never done one.

(8) Would you like to have more group assignments? Or you think there were too many?

Five responded that they did not like too many group assignments, and one said, *"I like to do assignments by myself. Group assignments, I find I can't do the whole assignment"*. One of them worried about issues of equity; he commented, *"If I can work with the students who are responsible in your group, I feel good. However, in general, there are at least one or two group members that are lazy"*. One of the graduates thought the number of group assignments at present was all right and just fine. Only one student said he would like more group assignments.

(9) Do you prefer to choose your own group members? Why / why not?

Four of the graduates liked to choose their group members. One of them commented, *"I prefer to choose group members by myself, to ensure I know the members are diligent and responsible"*. Two of them preferred the lecturer to choose the group members. One comment was, *"In addition, I am not active enough to approach people. So I prefer lecturers to assign my own group members"*. One of the graduates was not so sure; he said, *"Yes, but maybe no, because if you study with close friends... you need to discuss with people who have a totally different opinion to you; that is the purpose of group assignments"*. One student did not care one way or the other.

(10) What problems have you encountered in group assignments?

All except one had experienced problems related to group assignments. One made a good comment: *"At first, time organisation was a big problem. Furthermore, there are many ideas from the different people and sometimes it is difficult to consolidate a harmonious plan for the whole process of one assignment. Thirdly, some students do not pay much attention, or are lax, concerning the marking of assignments; thus not want to contribute too much. Fourthly, when some people do the assignment, their ideas are different with others"*. In addition, one of them worried that if everyone focused on only one part then they would not understand the whole assignment very well.

(11) Do you think you get better results with group assignments?

Four of them responded negatively and only one gave a positive answer. The rest thought it would depend on different situations. As one commented, *"It depends, I'd still prefer individual assignments. Not that I'll get better marks with a group assignment, but maybe if I get higher, it won't be fair if it's other peoples work, or lower when I'm restricted to a group"*.

(12) Do you think group assignment is a good thing for your learning? Why / why not?

Six of them thought group assignment was good. One of them commented, *"There are some advantages in group assignments. When you work in a group, aimed at an issue, it will help you broaden your ideas and your knowledge because everyone in your group will have their own opinions"*. One graduate disagreed, commenting, *"Maybe it can increase teamwork, or cultural learning, but from my experience, I don't know if it is really useful"*.

(13) Have there been many presentations since you started your course in an Australian University?

All of them had done some presentations in an Australian University.



(14) Do you like presentations? Why / why not?

Five of them liked presentations. One of them commented, *"I do like presentations.... At first, when you do presentations, it helps you to practice and improve your ability of talking in public. ... Once you complete your presentation and you get good results, you will feel successful and happy, well worth the effort"*. One graduate thought it was important but he just did not like it; he commented, *"When I was a student, I did not like presentations. However, I feel the presentation is a good exercise ...because presentation could occur anywhere you worked. For example, in my company you need to present what you did during the week every Friday"*. Another graduate said she did not like presentations because she was too shy. She commented, *"No, I'm too shy. In Japan, I didn't really have open presentations. My personality isn't suited to public speaking. It's hard to do in front of many people"*.

(15) What are the main problems with presentation?

It was overall agreed that the two main problems faced by international students were language problems and personality difficulties. Five graduates mentioned that language was the problem. Shyness and feeling nervous before the public was another main problem. One commented, *"Probably my personality, I just don't like talking in front of many people, I feel my English and accent isn't good enough, I'm not confident enough. ... It's worse when local students give theirs, and then you have to follow with your own presentation!"* Some graduates also mention problems of technique, such as using PowerPoint and time management. However, one of them commented, *"Shyness is not a huge problem; the only thing is knowing how to present your material, making it clear ... Time is also important, fitting your points and ideas into an acceptable time window"*.

(16) Do you like to work with international students as a group? Why / why not?

There were four groups of opinions. The first group liked to work with international students. One of them commented, *"Yes, I like to work with international students as a group.... when you work in groups with international students, you can trade interesting ideas from the students who are from the different countries and cultures"*. The second group contains three students who did not care about this. One of them commented, *"It doesn't really matter to me. I will use English as much as possible and different people have different study methods"*. The third group thought it depends on the situation. One of them said, *"It depends on the situation. If it is a discussion, I prefer local students,... I don't like to choose other Asian international students... I find it hard to understand some accents"*. The fourth group liked to work with local students. One of them commented, *"For me I like local students because they can help to improve my English"*.

(17) Do you think your group will achieve better or worse results if some or most of the members are international students?

There are two main groups of ideas. The first group believed that working with international members could achieve better results. One of them commented, *"Lots of international students obtain good grades for their assignments. ...When I worked with the group members who were from Japan, Hong Kong, Singapore and Taiwan, they were hard workers and their study attitude was earnest. ... and found I could get better marks"*. The second group was concerned that the ratio of international students in the group would affect results. One of them commented, *"Everything has a balance. For example, if you are the only international student and all others are locals, the results won't be like if the group was half international and half local. In my experience, half and half get a good result. Same as when the group is mostly international, with a local student. I don't think it is a good result"*.

5.4.3 Education Management Systems

(1) Did you have difficulties in selecting subjects, majors, minor or electives when you first started your university study in Australia?



Only two of the graduates had difficulties in selecting subjects, majors or electives when they first started their university study in Australia. One of them commented, *"I guess, yeah I had difficulties. I think that is the reason I studied the bachelor of Management and Professional studies. I could choose from a wide range of units to suit my interests, from Business, Law, Cultural Studies, and even Arts studies"*. The other graduates did not have problems because some of them didn't need to select and others obtained help from universities or their friends. One of them commented, *"No, I did not get any problems ... The university provided the materials for selecting majors, minors or electives and it was very helpful"*.

(2) Are you happy with the way the credit point system works?

Five of them thought that the credit point system was good. The remainder did not care or had not encountered problems. For example, one of them commented, *"It does not matter to me. However, I prefer the system where you have the same credit points in every unit"*.

(3) Are you familiar with your university's preferred referencing system?

Most of them had no problems with the preferred referencing system. One of them commented, *"Yes, I am familiar with my university's preferred referencing system. I felt I got lots of help and training in our university. For example, Rosemary always gave me good guidance for how to write the reference"*. But one graduate said he had difficulties at first, commenting, *"In the beginning I found it difficult for me. I went to see Rosemary a lot of times to help me use the referencing system, and everything. After consulting her, I found it quite easy to do ..."* Only one student answered no to this question.

(4) Where do you normally do your study? Why?

There were three groups of responses. The first group liked to study at the library. One of them said, *"In general, I study in the library because it is a good environment and has a great study atmosphere there. The library makes it easier to locate and study materials, and you can borrow books. It is also easier to meet fellow students who study the class with you"*. The second group liked to study at home. One comment was, *"Generally, at home. I prefer at home because I feel relaxed, I can study on the ground, or chair, or table, and I can study and eat at the same time!"* The third group would sometimes go to university and sometimes stay at home. One comment was, *"When I write an essay or report, I like to study in the computer labs, and in the library where there's more reference material"*.

(5) Do you spend much time studying on campus? Why/ why not?

All of the graduates spent much time studying on campus. Some of them felt more efficient if they studied on campus. One of the comments was, *"I spend a lot of time reading and studying at campus, when I go home I can relax and eat"*.

5.4.4 Language

(1) Would you say that language is the main problem when you started your study in Australia?

Seven out of the nine graduates felt that language was a big problem. One of them commented, *"Yes! In the beginning it was obviously difficult. The accent is very different to my own so listening and communicating wasn't too easy. ... so now everything is ok for me"*. Two of them still think language is a problem but no longer the major one. One of them said her biggest problem was culture shock as well as feeling lonely, and missing her family.

(2) What is the main issue with English? Reading? / Understanding? / Writing?

All the graduates had different problems in English. Some of them believed their insufficient skills in listening and speaking skills resulted in them not being able to understand lectures. For example, one of them commented, *"Before I come to*



Australia, I think I know English. But when I listen to the lecture and write report, it's different". Others found reading and writing very difficult. One of them commented, "Writing, because my grammar is really bad. I have found Australians cannot understand me".

(3) Do you find it hard to communicate with your lecturers/fellow students in English?

Five of the graduates found it easy to communicate with lecturers or fellow students in English, but four of them found it hard to do so. For example, one of them commented, *"Always. As English is not my first language, I may not be able to fully express my ideas of the learning subjects. Also, I may misunderstand teacher's messages, assignments, and textbook contents"*. Another student said she found it hard to communicate with lecturers, especially in class, but not with fellow students.

(4) Do you still prefer to speak your own language to your fellow students whenever there is opportunity?

Five said it was easier to use their mother tongue instead of English. For example, one of them commented, *"I prefer to communicate in my own language. However, if there are people who are from other countries, I prefer to speak English to show basic politeness to ... Sometimes, people who are from the same country as me start chatting to me via Chinese, my mother tongue, I thus reply to them in the same language"*. Only two of them insisted on speaking English.

(5) What assistance has the university provided to help you with your language problems?

One graduate said he had no problems with English. The rest of the graduates had received help from different resources at the university, such as help from lecturers, the university's language centre and English courses. One of them commented, *"Rosemary provided me lots of help for writing skill. I did not feel too much other help from our university"*. Another student commented, *"Firstly, when I came here I applied for a four week English course. That was quite useful"*.

(6) Do you believe the university has done enough to help you with your language problems?

One graduate said he did not care about this and another responded "definitely not". The rest of the graduates believed the university has done enough to help. One of them commented, *"Oh yes, yes. Initially, I didn't get a high score in the IELTS test, so the University said I can go to the TAFE for more English lessons... The university staff have been very helpful and friendly"*. Another student said, *"Rosemary helped me a lot, checking grammar and content. I found it very relieving"*.

(7) If not, what other assistance do you need?

There were a lot of ideas about this. Some students thought the university should provide more English courses, some suggested community activities, some even thought about a free English magazine. For example, *"The University should provide the chance for the student to make a speech. The university should also provide a free magazine to students and also provide a new book list and related free article to the international students to further help improve their English"*.

5.4.5 Culture-based Teaching and Learning Concepts

(1) International students: what were the main study difficulties you encountered in 1st year?

All seven graduates had encountered difficulties in the first year of study at in Australia University. One of them gave a very good summary; he said, *"At first, when I came here in the 1st year, I worried that I could not understand the local English and could not catch what the lecturers were saying, so I was nervous."*



Furthermore, I was not familiar with the university's environment. Sometimes I could not find the right way to the class. Thirdly, I felt the food was very different to the food from my country and I did not like the western food. Fourthly, there were also some other problems, such as public transport, finding accommodation, building a good relationship with my landlord and making friends with overseas students". Other students mentioned only one problem such as language, loneliness, homesickness, or culture shock. Only one student felt he had had good luck, and commented, "I've always had support, everyone has been so helpful. There were people to guide me, so I don't think I've had many other difficulties".

This section presents interview data analysis results for international students, staff, local students and graduates. These results will be used in the following sections.



6 Findings

This section will present the main findings from our survey and interview analysis. It consists of four parts. Firstly, we compare the responses to each question by local and international students; we then look at the different perspectives on teaching and learning between international students and lecturers. As the majority of our student participants are majoring in either IT or Business, we believe it is appropriate to look at the differences between IT and Business students in their learning experience. At the conclusion of our findings, we will discuss the difficulties faced by international students of Asian background when studying at Australian universities.

Based on the survey and interview data collected, our study found that international students experience significant cross-cultural and language difficulties in their learning process.

Their cross-cultural learning difficulties manifest in the following ways:

- The teaching methods used in Australian universities, specifically in classroom interaction and face-to-face teaching, are significantly different from those used in Asian countries. Open questions show that some 53% of international undergraduate students and 57.87% of international postgraduate students indicated that the main difference between the universities in their home country and Australia is in the teaching methods. These students have difficulty in readily accepting Australian teaching methods, particularly in their first year at Australian universities. Many of them prefer more face-to-face teaching and fewer student questions or class discussions during lectures. Some Asian students consider it to be a mark of appreciation and respect for their teachers for students to listen attentively and quietly in class. They consider that all discussion should take place after classes as any discussion will impinge on the teacher's lecture time, resulting in reduced knowledge transmission to students, with the consequence that students will learn less.
- In their approach to learning, many students of Asian background dislike insisting on their own opinions when they conflict with those of the teacher. They sometimes have difficulty or don't like asking questions to their lecturers directly in class. These issues result largely from the students' cultural background. In some Asian countries, teachers ask questions in class to check students' understanding of the content they are teaching, rather than encouraging critical thinking. This is the main reason why students of Asian background ask fewer questions in class.
- Students from different cultural backgrounds have different attitudes to working in groups. Our data shows that Asian students have a similar level of participation in group work and group assignments as non-Asian students, but are less likely to offer different ideas because they value group harmony and respect for authority without argument. However, they often work as a team after classes to help each other and share their understanding of the subjects they have covered in their daily study.
- The learning methods used in Australian schools are significantly different from those used in their Asian counterparts. The survey results show that Asian undergraduate students rely more on rote learning and memorisation than postgraduates. In contrast, postgraduate students participate more in a variety of team work and experience better academic achievement. Indian students, who constitute one of the biggest international student communities, generally have better English skills than students from other Asian countries. They prefer an indirect communication style, whereas Chinese students prefer a capabilities-



based communication style such as e-mail, because their reading and writing skills are in general better than their listening and speaking skills. When they have been unable to fully comprehend what the teacher talked about in class, they will read the textbooks and lecture notes after class as compensation.

- Some Asian students explain that because of underdeveloped interpersonal communication skills, they seldom express themselves in class and group discussion even they know the answer and hold personal opinions. As an example, in group assignments, Asian students are almost always found to be in charge of reading-based tasks such as data collection, or a literature review, rather than presentations. There are very few Asian students who are group leaders (even they were leaders in their home countries).

English language difficulties affect international students in the following learning activities:

- Reading the textbook – more than half the international students surveyed experience difficulties in reading and understanding textbooks due to English language problems; they therefore read less of the recommended textbooks.
- Working in a group – due to language problems, many Australian local students are not in favour of working in groups with international students. For the same reason, international students generally would prefer to work in groups with other international students.
- Understanding lectures – most of the international students surveyed have difficulties with listening to lecturers and taking notes at the same time due to their language problems.
- Completing homework – approximately half the international students surveyed need help with their English-related difficulties when completing their homework/assignments.
- Participating in class discussions – more than half the international students surveyed do not feel confident about participating in class discussions.

Class presentations – only a small percentage of international students are confident in class presentation due to their language difficulties

Apart from the cultural and language problems, our study also found that an unfamiliar environment, different teaching methods and culture shock are the main difficulties experienced by first-year international students.

6.1 Comparison between international students and local students on learning

Our student survey data reveal that compared with their local counterparts, the international students experience significant language difficulties and culture shock in their learning process. These issues affect their learning experience in various components of their study, such as working in a group, adapting to lecturer's teaching style, and so on.

Using the outcomes of correlation analyses of all student data as summarised in Table 60 of section 4, those questions with responses that were significantly different from local and international students are extracted in table 63 below. In this table, only those analysis outputs with p-value of 0.05 or below and a Phi and Cramer's V of greater than 0.3 (as discussed in section 4.2) are included.



Table 63 Correlation analysis results where local students' and international students' responses are significantly different

Question No.	Question	P-value	Correlation with student category	Phi & Cramer's V
II.4	What difficulties do you have reading your textbooks?	0	Dependent	0.454
III.4.G	How can this help in learning and future development: Working in groups with international students	0	Dependent	0.394
III.5	What are the main differences between teaching methods here and teaching methods in your previous education?	0	Dependent	0.311
V.1	What are the main difficulties in cross-cultural communication?	0	Dependent	0.465
V.2	Do you have any English language- related difficulties in understanding lectures?	0	Dependent	0.389
V.3	Do you have any English language-related difficulties when completing your homework?	0	Dependent	0.509
V.4	Are you confident about your English when participating in class discussions?	0	Dependent	0.547
V.5	Do you have any English language-related difficulties in class presentations?	0	Dependent	0.519
VII.1.A	What are the main study difficulties you encountered at university? In my 1st Year	0	Dependent	0.356
VII.2	Do you feel any culture shock which influences your study?	0	Dependent	0.308

From Table 63, we can see that there were 10 questions where the responses were significantly different between local and international students. Most of these questions come from Section V of the survey questionnaire which is the section on "Languages". The other questions were related to "difficulties in reading textbook" (II.4); "working in groups with international students" (III.4.G); "teaching methods" (III.5); "main study difficulties" (VII.1.1) and "culture shock" (VII.2). We shall further discuss these results and findings in detail below.

6.1.1 Difficulties in reading and understanding textbooks due to English problems

Over half the international students have difficulties reading and understanding textbooks due to English problems. They therefore read less recommended textbooks but do read textbooks in their own language.

Question II.4. What difficulties do you have reading your textbooks?

- A. none
- B. I am a slow reader due to English problems
- C. I am a slow reader due to other problems: explain _____
- D. I cannot understand the contents easily due to English problems
- E. others, please indicate: _____



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Difficulties when reading text books	none	Count % within Major education country	317 83.4%	283 44.8%	600 59.3%
	I am a slow reader due to English problems	Count % within Major education country	8 2.1%	216 34.2%	224 22.1%
	slow reader due to other problems	Count % within Major education country	17 4.5%	29 4.6%	46 4.5%
	can't understand contents	Count % within Major education country	4 1.1%	71 11.2%	75 7.4%
	Others	Count % within Major education country	34 8.9%	33 5.2%	67 6.6%
Total		Count % within Major education country	380 100.0%	632 100.0%	1012 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	208.229 ^a	4	.000
Likelihood Ratio	255.937	4	.000
N of Valid Cases	1012		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.27.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.454	.000
	Cramer's V	.454	.000
N of Valid Cases		1012	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



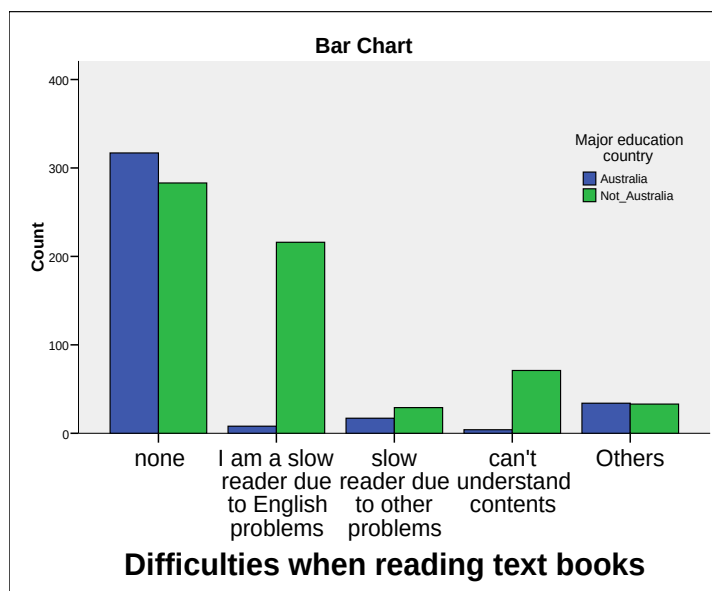


Figure 6.1

Here we can see that more than 83% of the Australian students responded that they no problems in reading textbooks, while less than 45% of the international students responded the same. In addition, over 34% of the international students responded that they are slow readers due to English problems in comparison with just 2% of Australian students. Given that textbooks are used in almost every subject offered in universities, this is quite a significant problem for international students.

6.1.2 Working in groups with international students

Many Australian local students are not in favour of working in groups with international students. International students would prefer to work in groups with other international students.

Question III.4G. Preferred teaching methods?

G.. Working in groups with international students	1-----2-----3-----4-----5
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Crosstab

			Major education country		Total
			Australia	Not_Australia	
Preferred working in groups with international students	1 strongly disagree	Count % within Major education country	97 25.3%	31 4.9%	128 12.6%
	5 strongly agree	Count % within Major education country	19 5.0%	110 17.3%	129 12.7%
	2	Count % within Major education country	65 17.0%	48 7.6%	113 11.1%
	3	Count % within Major education country	155 40.5%	259 40.8%	414 40.7%
	4	Count % within Major education country	47 12.3%	187 29.4%	234 23.0%
Total		Count % within Major education country	383 100.0%	635 100.0%	1018 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	157.968 ^a	4	.000
Likelihood Ratio	162.313	4	.000
N of Valid Cases	1018		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 42.51.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.394	.000
	Cramer's V	.394	.000
N of Valid Cases		1018	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



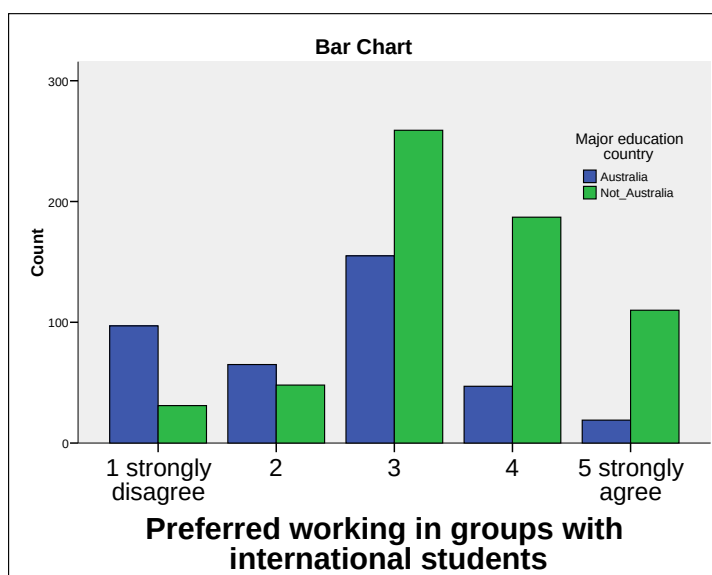


Figure 6.2

From the bar chart we can see that the distributions of responses between Australian students and international students are almost in reverse order. Here we can see that Australian students are not in favour of working in groups with international students, with over 42% having chosen either 1 or 2 as their response. International students, on the other hand, would prefer to work in groups with other international students, as indicated by the fact that over 46% chose 4 or 5 as their response.

6.1.3 Teaching methods in Australian universities

The teaching methods used in Australian universities are significantly different from those used in Asian countries.

Question III.5. What are the main differences between teaching methods here and teaching methods in your previous education?

- A. More interaction between lecturers and students at university?
- B. Fewer hours of face to face teaching at university?
- C. Students are encouraged to do more self-study and critical thinking?
- D. More group assignments at university?
- E. Others please indicate_____.



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Main differences between teaching methods here and in your previous education	more interaction	Count % within Major education country	35 9.5%	170 27.0%	205 20.5%
	fewer hours of face to face teaching	Count % within Major education country	162 44.0%	112 17.8%	274 27.5%
	more self study	Count % within Major education country	122 33.2%	247 39.2%	369 37.0%
	more group assignments	Count % within Major education country	36 9.8%	69 11.0%	105 10.5%
	others	Count % within Major education country	13 3.5%	32 5.1%	45 4.5%
Total		Count % within Major education country	368 100.0%	630 100.0%	998 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	96.643 ^a	4	.000
Likelihood Ratio	98.406	4	.000
N of Valid Cases	998		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.59.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.311	.000
	Cramer's V	.311	.000
N of Valid Cases		998	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



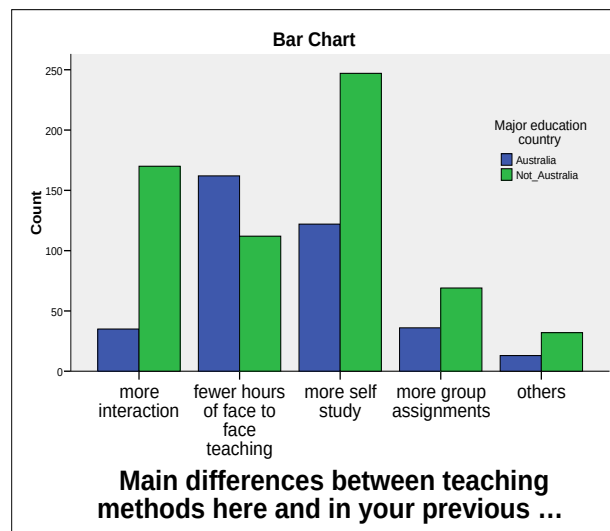


Figure 6.3

Judging from the responses to this question, we could say that the teaching methods used in Australian schools, specifically in classroom interactions and face-to-face teaching, are significantly different from those used in their overseas counterparts. While 27% of the international students felt that there was more interaction between lecturers and students at university, less than 10% of the Australian students agreed. Similarly, while 44% of the Australian students felt that there were fewer hours of face-to-face teaching at university, less than 18% of the international students felt the same.

6.1.4 Communication

“Lack of common interest” and “not confident in English” are the main difficulties for international students in communicating with Australian local people.

Question V.1. Due to the cultural and language differences, sometimes it is not easy to communicate with those students from different cultural backgrounds. What do you think are the main difficulties in communicating?

- A. I am not confident in English language
- B. Lack of common interests
- C. I only like to communicate in my own language
- D. Others, please indicate _____



Crosstab

			Major education country		Total
			Australia	Not_Australia	
What are the main difficulties in cross culture communicating	not confident	Count	23	214	237
		% within Major education country	6.6%	34.9%	24.7%
	lack of interests	Count	131	299	430
		% within Major education country	37.9%	48.7%	44.8%
	only like own language	Count	89	20	109
		% within Major education country	25.7%	3.3%	11.4%
	others	Count	103	81	184
		% within Major education country	29.8%	13.2%	19.2%
Total	Count	346	614	960	
	% within Major education country	100.0%	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	207.207 ^a	3	.000
Likelihood Ratio	218.995	3	.000
N of Valid Cases	960		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.29.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.465	.000
	Cramer's V	.465	.000
N of Valid Cases		960	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



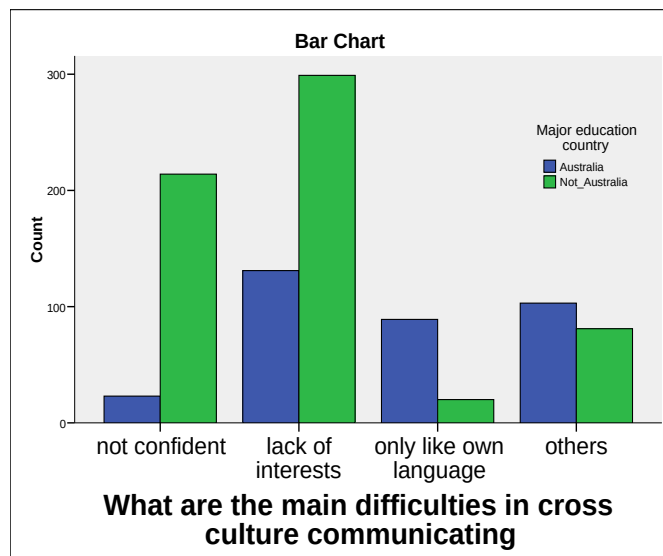


Figure 6.4

Results show that both Australian and international students felt that “lack of common interest” is the main difficulty in communicating with people from different cultural background. However, nearly 35% of the international students stated that “not confident in the English language” was the second main difficulty. It is also important to note that nearly 26% of the Australian students stated that they only like to communicate in their own language, while another 30% stated “others” as the main difficulty, which will need further investigation.

6.1.5 Difficulties during lectures

Most international students have difficulties in trying to listen to lecturers and taking notes at the same time due to language problems.

Question V.2. Do you have any English language-related difficulties in understanding lecturers?

- A. I can't understand my lecturers most of the time
- B. I can understand my lecturers most of the time but it is hard to listen and take notes at the same time
- C. I cannot understand everything my lecturers say but I can catch up by reading lecture notes after classes
- D. No problem at all



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Do you have any English language related difficulties in understanding lectures	can't understand	Count % within Major education country	12 3.2%	34 5.3%	46 4.6%
	hard to take notes	Count % within Major education country	36 9.7%	257 40.4%	293 29.0%
	only if read the lecture notes	Count % within Major education country	33 8.8%	95 14.9%	128 12.7%
	no problem	Count % within Major education country	292 78.3%	250 39.3%	542 53.7%
Total		Count % within Major education country	373 100.0%	636 100.0%	1009 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	152.295 ^a	3	.000
Likelihood Ratio	164.046	3	.000
N of Valid Cases	1009		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.00.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.389	.000
	Cramer's V	.389	.000
N of Valid Cases		1009	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



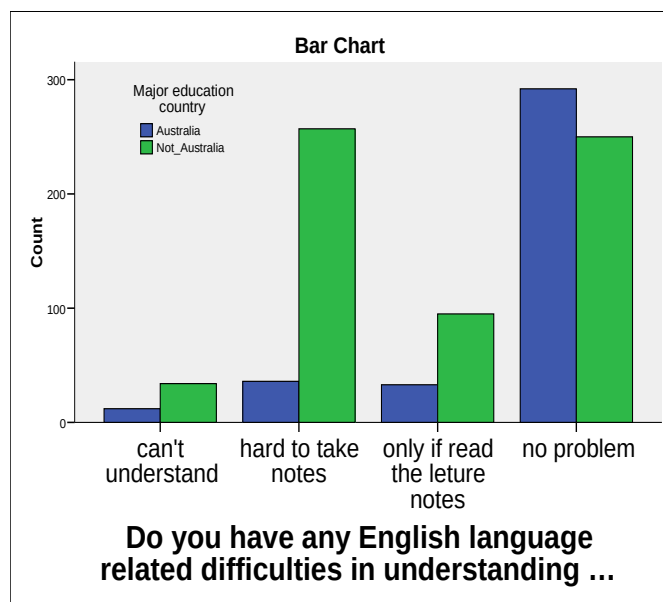


Figure 6.5

While it is encouraging to see that nearly 40% of the international students felt that they didn't have any English language-related difficulties in understanding lecturers, another 40% felt that they had difficulty in trying to listen to lecturers and take notes at the same time. Only 10% of the Australian students stated this difficulty. This should send a clear signal to educators to rethink how information and course material should be disseminated to students effectively.

6.1.6 Difficulties in completing homework/assignments

About half the international students need help with their English-related difficulties when completing their homework/assignments.

Question V.3. Do you have any English language-related difficulties when completing your homework?

- A. I need help from academic language and learning centres or learning assistants or other students
- B. I need the help of dictionaries
- C. Very slow in writing as I need to translate into my first language
- D. No problem at all



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Do you have any English language related difficulties when completing your homework	need help of others	Count % within Major education country	10 2.7%	119 18.7%	129 12.8%
	need help from dictionaries	Count % within Major education country	15 4.0%	191 30.1%	206 20.4%
	translate ot first language	Count % within Major education country	7 1.9%	74 11.7%	81 8.0%
	no problem	Count % within Major education country	341 91.4%	251 39.5%	592 58.7%
Total		Count % within Major education country	373 100.0%	635 100.0%	1008 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	261.113 ^a	3	.000
Likelihood Ratio	296.067	3	.000
N of Valid Cases	1008		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 29.97.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.509	.000
	Cramer's V	.509	.000
N of Valid Cases		1008	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



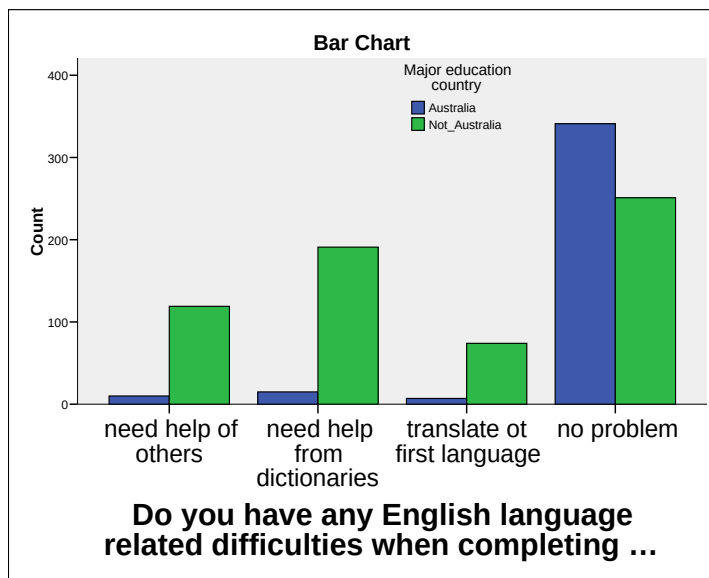


Figure 6.6

Our results show that nearly 49% of the international students need some form of help with their language-related difficulties (responded to A & B) when completing their homework, while 91% of the Australian students did not have any difficulties as such. Given that homework is a big part of any study, this problem faced by many international students is significant and will certainly warrant further investigation.

6.1.7 Participation in class

Over half the international students do not feel confident participating in class discussions.

Question V.4. Are you confident about your English when participating in class discussions?

- A. I am very confident
- B. I am not very confident but I make an effort to participate
- C. Not confident so I don't participate much
- D. Others, please indicate _____.



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Are you confident about your English to participate in-class discussions	very confident	Count % within Major education country	323 86.8%	192 30.2%	515 51.1%
	not very but try to	Count % within Major education country	35 9.4%	332 52.2%	367 36.4%
	not confident	Count % within Major education country	11 3.0%	96 15.1%	107 10.6%
	others	Count % within Major education country	3 .8%	16 2.5%	19 1.9%
Total		Count % within Major education country	372 100.0%	636 100.0%	1008 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	301.640 ^a	3	.000
Likelihood Ratio	328.676	3	.000
N of Valid Cases	1008		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.01.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.547	.000
	Cramer's V	.547	.000
N of Valid Cases		1008	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



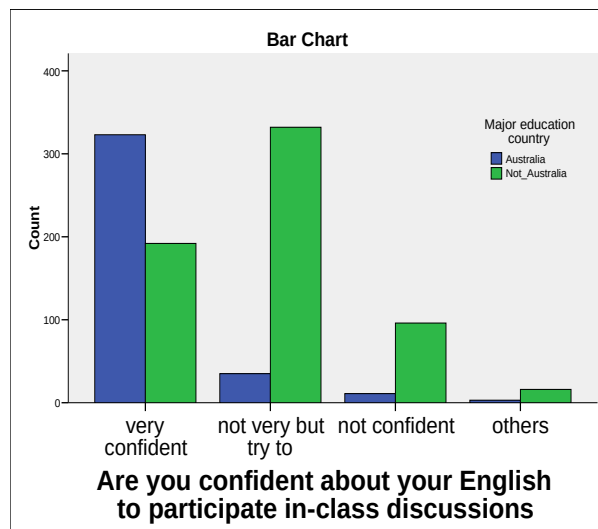


Figure 6.7

Only 30% of the international students felt that they were very confident about their English when participating in-class discussions compared to 87% of the Australian students who felt the same. Over half (52%) the international students did not feel very confident but would make an effort to participate. However, there is cause for concern regarding the 15% of international students who said that they do not feel confident and therefore do not participate much in class discussion. Class discussion plays an important role in university learning, so to ensure that international students feel confident in participating we must first fix the language problems faced by many of these students.

6.1.8 Class presentation

Only a small percentage of international students are confident in class presentation due to their language difficulties.

Question V.5. Do you have any English language-related difficulties in class presentations?

- A. I need to get help from others for my presentations
- B. I can do it with confidence after good practice
- C. If it is a group presentation, I would like to prepare material and get a local student to make the presentation
- D. I am confident to do it



Crosstab

			Major education country		Total
			Australia	Not_Australia	
Do you have any English language related difficulties in class presentations	help from others	Count % within Major education country	3 .8%	79 12.4%	82 8.2%
	need practics	Count % within Major education country	51 13.8%	294 46.2%	345 34.3%
	don't present in group	Count % within Major education country	14 3.8%	85 13.3%	99 9.8%
	confident	Count % within Major education country	301 81.6%	179 28.1%	480 47.7%
Total		Count % within Major education country	369 100.0%	637 100.0%	1006 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	271.388 ^a	3	.000
Likelihood Ratio	292.795	3	.000
N of Valid Cases	1006		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.08.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.519	.000
	Cramer's V	.519	.000
N of Valid Cases		1006	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.





Figure 6.8

While over 81% of the Australian students are confident in class presentation, only 28% of the international students felt the same. Although it is encouraging to see that over 46% of international students felt that they could do it with confidence after good practice, it is still a concern that over 13% of international students will opt not to do class presentation if they can get another group member to do it.

6.1.9 Difficulties for first-year international students

Language, unfamiliar environment, different teaching methods are main difficulties for first-year international students.

Question VII.1.1. What are the main study difficulties you encountered at university?

In my 1st Year:

- A. Language
- B. Unfamiliar environment
- C. Teaching method
- D. University education management systems



Crosstab

			Major education country		Total
			Australia	Not_Australia	
What are the main study difficulties you encountered at university in 1st year	language	Count % within Major education country	18 4.9%	223 36.3%	241 24.6%
	unfamiliar environment	Count % within Major education country	162 44.5%	195 31.7%	357 36.5%
	teaching method	Count % within Major education country	136 37.4%	135 22.0%	271 27.7%
	university education management systems	Count % within Major education country	47 12.9%	62 10.1%	109 11.1%
	ED	Count % within Major education country	1 .3%	0 .0%	1 .1%
Total		Count % within Major education country	364 100.0%	615 100.0%	979 100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	124.315 ^a	4	.000
Likelihood Ratio	147.516	4	.000
N of Valid Cases	979		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .37.

Symmetric Measures

	Value	Approx. Sig.
Nominal by Phi	.356	.000
Nominal by Cramer's V	.356	.000
N of Valid Cases	979	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



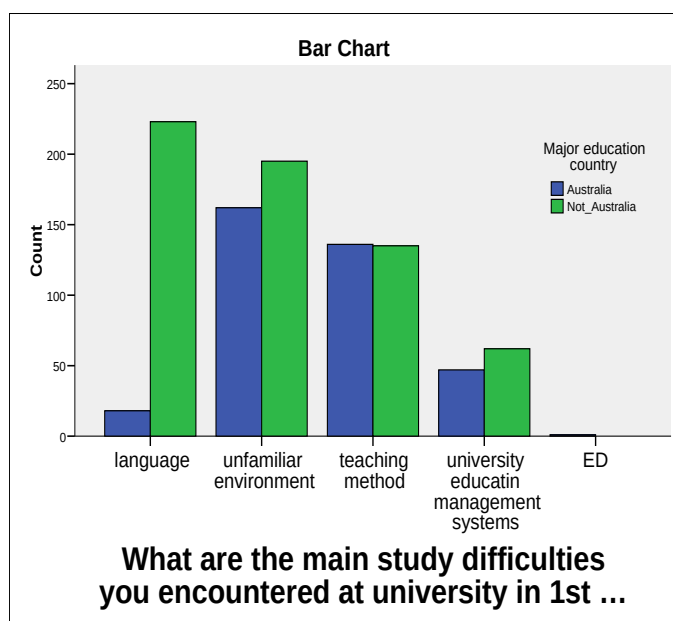


Figure 6.9

Our results show that Australian students view “unfamiliar environment” and “teaching method” as their top two study difficulties during their first year of university study. International students, on the other hand, voted “language” as the main study difficulty in first year university study, followed by “unfamiliar environment” then “teaching method”.

6.1.10 Culture shock

Culture shock influences study of international students to a certain degree.

Question VII.2. Do you feel any culture shock which influences your study?

A. Yes

B. No

C. Not much

If you select Yes, please give an example: _____

Crosstab

			Major education country		Total
			Australia	Not_Australia	
Do you feel any culture shock which influences your study	yes	Count	46	120	166
		% within Major education country	12.3%	19.5%	16.8%
	no	Count	259	239	498
		% within Major education country	69.4%	38.9%	50.5%
	not much	Count	66	255	321
		% within Major education country	17.7%	41.5%	32.5%
	D	Count	2	0	2
		% within Major education country	.5%	.0%	.2%
Total		Count	373	614	987
		% within Major education country	100.0%	100.0%	100.0%



Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	93.819 ^a	3	.000
Likelihood Ratio	97.123	3	.000
N of Valid Cases	987		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .76.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.308	.000
	Cramer's V	.308	.000
N of Valid Cases		987	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

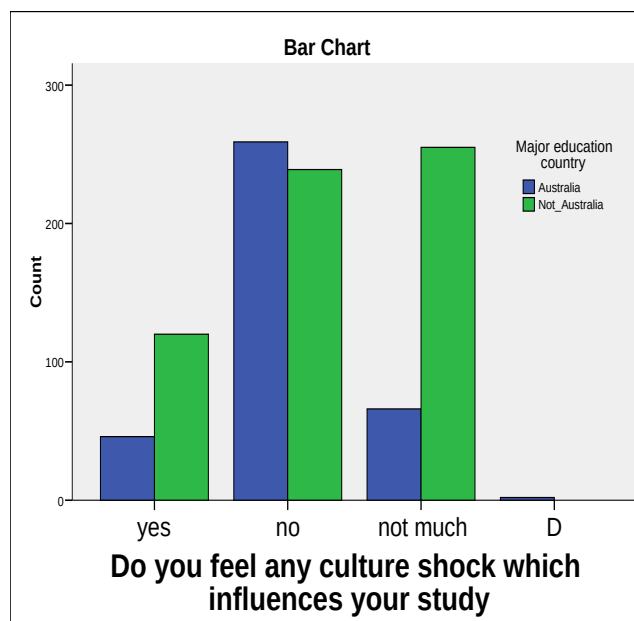


Figure 6.10

While it was a relief to see that nearly 40% of the international students do not feel any culture shock which influences their study, there is still a significant number of students (close to 20%) who felt otherwise. In addition, the other 41% felt some sort of culture shock which may have influenced their study.

6.1.11 Findings from interview data analysis

Unlike international students, local students do not have language problems when reading textbooks, but they do have other kinds of problems, such as not being able to find the key points and confusion about the terminology. For example, one of them said, "When reading from my textbook I often find it hard to filter through the text to find the key pieces of information". They also think a good textbook should



have good examples and be easy to read. For example, one of them said, “Clear and precise headings with worked examples and working for answers (when doing math) also secondary sources in a textbook to back-up what is being said”.

Similar to international students, some of the local students do not regularly ask questions in class. They prefer other ways, such as sending emails. However, they support the idea that students should be given more opportunities to ask questions. All the local and international students think that students should actively engage in the classroom discussions in their learning.

Most of the local and international students are willing to choose their own group members for group assignments. Local students think that some group members relying on others and not trying their best is the main problem of group assignments. For example, one of them said, “In some group assignments I have found that some students are content with gaining mediocre marks, just to skim through. This can be quite distressing for members of the group who are highly ambitious and want to gain the best possible mark. ‘Social loafing’ can also occur where students when put into a group situation allow others to contribute more work”.

As to presentation, some of the local students also have the same problem as international students in that they are very shy of doing presentation. For example, one local student said, “I am a shy person. I am not comfortable with standing in front of people and talking, which means I also go badly in them usually”.

Unlike international students, most local students do not mind doing group assignments with international students, even if they have language problems, and think it is a good way for local students to experience different cultures. For example, one local student said, “I would like to do a group assignment with international students as it will help you in the way that you can get to see another culture and they may be very helpful in the group as they may have the information that the group needs or they may have an idea that will help the group to answer the question that your group has been set”.

A majority of local and international students prefer not to spend most of their time on campus. For example, one local student said, “No I don’t, I only go there sometimes if I need to use a textbook or use their net to download some things I need because mine is extremely slow”.

6.2 Comparison of perspectives between international students and lecturers on teaching and learning

The interview questions are composed of five main sections, the textbook and reference materials, teaching and learning methods, assessment, education management systems and language issues in general. Despite some significant differences between students and lecturers regarding various issues in these five categories, both students and lecturers agree that the biggest difficulty in this cross-cultural learning and teaching environment is the language and cultural barrier. This section will compare the perspectives between international students and lecturers from the following five aspects.

6.2.1 Teaching content and textbooks

1. Regarding the reading

Most lecturers set specific readings for students and expect their students to read them and improve understanding; however, the majority of international students have problems reading textbooks due to the language difficulties. Limited vocabulary in the discipline area makes the reading very time-consuming and stressful. Thus, students are not able to meet the expectations of lecturers. Students therefore want to read the most important parts of the textbooks and prefer to only



read lecture notes.

2. Regarding the choice of textbook

Most lecturers think good textbook should have broad coverage, be contemporary, and have a combination of theory and practice. The students would like a textbook with sufficient case studies and examples that has simple language and is well-structured. Interestingly, the interviews with local students reveal that even local students feel their current textbooks use too much jargon, do not give simple answers and go into unnecessary depth. Most students think the textbook content is too long and prices are too high.

3. Lecture notes

Most lecturers think the students rely too much on PowerPoint slides. However, due to the difficulty of reading the textbook, students choose to rely heavily on simplified study material such as lecture notes to enhance their understanding of the subject.

6.2.2 Teaching and Learning Methods

There is some consistency in students' and lecturers' perspective of teaching method. Most lecturers adopt, or attempt to adopt, class activity in their teaching and make an effort to encourage students to talk, and most students prefer to have more interaction in class, such as class discussion. However, almost all students would like to be in a small group teaching environment so that they feel more confident and comfortable in speaking. Most international students prefer and expect individual attention from the lecturer. However, some students prefer the lecturer to talk all the way through, giving good examples and explanation, as they think this is a more efficient way for them to learn. More international students prefer more face-to-face teaching, less students questions and class discussions. They prefer to have more knowledge to be transferred from lectures to students.

6.2.3 Assessment

1. Group assignment

Most of the students view the group assignment positively, despite the fact that they all experience difficulty working with each other. They think it is important for them to develop teamwork skills. Most prefer to find their own group, which they feel will work better. However, the lecturers have quite a mixed attitude towards group assignments. Some think the group work idea is good; however, the apparent problem is the "free ride". Thus, lecturers are very cautious with group work. When it comes to group formation, most lecturers ask students to form their own groups. Some lecturers tend to make an effort to mix international students with local, however very few students prefer this.

2. Presentation

Lecturers think the presentation is an important tool for developing students' communication skills; however international students lack confidence in presentation, especially when it is a part of their assessment. While a little over half of the students like presentation, the other half does not. The international students feel they are disadvantaged in language, thus they feel nervous and shy which apparently impacts negatively on their performance.

6.2.4 Education Management system

Lecturers feel that students should have more knowledge regarding university education management systems, especially about university policies such as the policy on plagiarism. Most students are satisfied with the credit point system adopted in Australia. However many of them have difficulties when it comes to selecting subjects. Even though the International Office of each university provides



some kind of assistance, they need more discipline-specific advice from academics.

6.2.5 Language

Both lecturers and students recognise that the language problem is the most significant difficulty during study. The language difficulty has a negative impact on students' academic performance, despite the fact that lecturers do accommodate international students' English problems when assessing their work.

Students in general do not have problems communicating with fellow students and their lecturers. However, the main issues are with listening and academic writing. Students would like their university to do more to assist with their language difficulties, such as providing free lessons, social networking, and academic support to improve their level of academic English.

In general, both lecturers and students agree that culture shock is experienced by international students, especially in the first year of study. Universities need to do more to help them adapt to a new culture of learning. Every student we interviewed has undergone some difficulties in struggling with a new lifestyle, teaching and learning practice, and even social activities in Australia.

6.3 Differences between IT and Business students in learning

Student participants in this study came from two main disciplinary areas: Information Technology (IT) and Business. Consequently, the outcomes of this study have also given us some insight into the learning issues concerning international students from these two disciplinary areas.

The table below shows the comparison of correlation analyses results between overall students, IT students and Business students when investigating the differences between Australian students and international students as they relate to learning issues:

Table 64 Comparison of correlation analyses results between overall students, IT students and Business students

Question name	All students (1026)		IT students(292)		Business students (539)	
	P-value	Phi & Cramer's V	P-value	Phi & Cramer's V	P-value	Phi & Cramer's V
II. Teaching contents and textbook						
II.1	0.009	0.106	0.078		0.129	
II.2	0	0.167	0.261		0	0.213
II.3	0.241		0.095		0.176	
II.4	0	0.454	0	0.392	0	0.489
II.5	0	0.167	0	0.282	0	0.183
II.6.A	0.001	0.138	0.29		0.005	
II.6.B	0.233		0.25		0.262	
II.6.C	0.027	0.104	0.099		0.264	
II.6.D	0.241		0.364		0.065	
II.6.E	0.254		0.071		0.454	
II.6.F	0.681		0.729		0.898	
II.6.G	0.079		0.79		0.137	
II.7	0	0.212	0	0.248	0	0.190
II.8	0.183		0.209		0.093	



II.9	0.022	0.097	0.174		0.02	0.135
II.10	0.088		0.044	0.167	0.673	
III. Teaching and learning methods						
III.1	0	0.186	0.033	0.173	0	0.218
III.2	0.01	0.278	0.105		0.031	0.335
III.3.A	0.554		0.739		0.587	
III.3.B	0.855		0.678		0.759	
III.3.C	0.359		0.907		0.649	
III.3.D	0.166		0.847		0.278	
III.4.A	0.281		0.697		0.119	
III.4.B	0	0.161	0	0.263	0.365	
III.4.C	0	0.183	0.161		0	0.256
III.4.D	0.077		0.52		0.031	0.141
III.4.E	0	0.145	0.008	0.219	0.063	
III.4.F	0.358		0.281		0.768	
III.4.G	0	0.394	0	0.462	0	0.392
III.5	0	0.311	0	0.307	0	0.334
III.6	0.097		0.001	0.250	0.816	
III.7	0.001	0.138	0.088		0	0.210
III.8	0.158		0.662		0.181	
III.9	0.248		0.001	0.263	0.752	
IV. Education management system						
IV.1	0	0.294	0	0.310	0	0.263
IV.2	0.053		0.115		0.374	
IV.3	0	0.140	0	0.257	0.001	0.163
IV.4	0.068	0.163	0.007	0.203	0.007	0.151
IV.5	0		0.008	0.218	0.365	
IV.6	0	0.254	0	0.290	0	0.262
V. Language						
V.1	0	0.465	0	0.508	0	0.487
V.2	0	0.389	0	0.265	0	0.462
V.3	0	0.509	0	0.482	0	0.547
V.4	0	0.547	0	0.543	0	0.600
V.5	0	0.519	0	0.513	0	0.538
VI Culture-based teaching & learning concepts						
VI.1	0	0.248	0.029	0.193	0	0.286
VI.2	0	0.206	0.233		0	0.254
VI.3	0.099		0.626		0.0453	
VI.4	0	0.179	0.007	0.204	0	0.189
VI.5	0.73		0.877		0.98	
VI.6	0	0.212	0	0.281	0	0.231
VI.7	0.042	0.099	0.063		0.05	0.121
VI.8	0.085		0.462		0.15	
VI.9	0.002	0.120	0.095		0.037	0.127
VI.10	0.265		0.427		0.406	
VI.11	0.307		0.278		0.394	
VII. Other						
VII.1.1	NA					
VII.1.2	NA					
VII.2	NA					



The column label “p-value” indicates the p-values of the chi-square test in determining whether there is an association between the response pattern and the classification of students (Australian and international). For those questions returning a p-value less than or equal to 0.05, the column “Phi & Cramer’s V” indicates the strength of the association, and values that are 0.3 or higher are highlighted.

As we can see from Table 64, the outcomes of the three groups of students are very similar with three exceptions, which are: 1) there is a significant difference between the two categories of students (Australian and international) amongst the Business students in response to question III.2; 2) there is a significant difference between the two categories of IT students in response to question IV.1; and 3) while there is a significant difference between the two categories of students amongst overall and Business students in response to question V.2, that was not the case with IT students. We shall examine these in more detail below.

1) Reasons for feeling that the teaching methods of current subjects were not suitable

Question:

III.2. If you select C in Question 1, please give your reasons:

- A. It is too different from the teaching methods in my previous education
- B. It is difficult to accept the teaching methods due to my language issues
- C. I don't like these teaching methods
- D. *Others, please indicate* _____

The related question 1 is:

III.1. Do you feel that the teaching methods in your current subjects are suitable?

- A. Very suitable
- B. Not suitable at the beginning but now they are fine
- C. Not suitable for me
- D. *Others, please indicate:* _____

Correlation analyses performed on the three sets of data show that there is no significant difference between Australian and international students amongst overall students and IT students, which was not the case with Business students where a weak-moderate association was revealed (Phi & Cramer’s V of 0.335).

Table 65 below shows the distribution of responses amongst the three sets of data:

Table 65. Distribution of responses to question III.2 from overall students, IT students and Business students:

	Overall Students			IT Students			Business Students		
	Aust	Intl	Total	Aust	Intl	Total	Aust	Intl	Total
different	10.5%	27.8%	21.1%	9.5%	39.1%	25%	12.9%	25%	20.3%
difficult	10.5%	18.9%	15.6%	14.3%	17.4%	15.9%	9.7%	20.8%	16.5%
don't like	43.9%	35.6%	38.8%	38.1%	26.1%	31.8%	45.2%	45.8%	45.6%
others	35.1%	17.8%	24.5%	38.1%	17.4%	27.3%	32.3%	8.3%	17.7%
	100%	100%	100%	100%	100%	100%	100%	100%	100%
Count	57	90	147	21	23	44	31	48	79



From Table 65, we can see that there is some difference in the distribution pattern of responses between Australian and international students of each set of data. However, it is obvious that those amongst Business students were more radical. It is true that amongst Business students, the main reason both Australian and international students gave for why they think the teaching methods in their current subjects were not suitable for them was because they didn't like them. However, 25% of international students stated that the teaching methods were different from the teaching methods in their previous education, and over 20% of the international students also felt that the teaching methods were difficult to accept due to their language. Australian students, on the other hand, did not have the same issues and chose "others" as their second main reason.

2) Experience with credit-point systems

Question:

IV.1. Do you have any experience with credit-point systems in your previous education?

- A. Yes
- B. Some experience
- C. Very little
- D. Not at all

Correlation analyses performed on the three sets of data show that there is some association between the response pattern and the categories (Australian and international) of students from all three sets of data. However, the statistics from the IT student data group appeared to be strongest (Phi & Cramer's V of 0.310). Table 66 shows a summary of responses distribution amongst the three sets of data for question IV.1.

Table 66. Distribution of responses to question IV.1 from overall students, IT students and Business students:

	Overall Students			IT Students			Business Students		
	Aust	Intl	Total	Aust	Intl	Total	Aust	Intl	Total
Yes	15.0%	38.1%	29.4%	18.0%	47.4%	37.3%	13.3%	31.1%	24.0%
Some experience	14.7%	19.1%	17.4%	17.0%	16.7%	16.8%	15.2%	20.5%	18.4%
Very little	16.0%	14.3%	15.0%	8.0%	6.3%	6.8%	19.9%	19.9%	19.9%
Not at all	54.3%	28.5%	38.2%	57.0%	29.7%	39.0%	51.7%	28.6%	37.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Count	381	635	1016	100	192	292	211	322	533

From Table 66, we can see that in comparison to the other two sets of data, the IT students group has the highest proportion of international students (over 47%) who had experience of credit-point systems in their previous education, compared to only 18% of Australian students in the same group who said the same. Similarly, the IT students group also has the highest proportion of Australian students (57%) who did not have any experience with credit-point systems in their previous education. The proportion of international students in this group who did not have any experience was only about 1% above the same in the other two sets of data.

3) English language-related difficulties in understanding lectures

Question:

V.2. Do you have any English language-related difficulties in understanding



lectures?

A. I can't understand my lecturers most of the time

B. I can understand my lecturers most of the time but it is hard to listen and take notes at the same time

C. I cannot understand everything my lecturers say but I can catch up by reading lecture notes after classes

D. No problem at all

Correlation analyses performed on the three sets of data show that while there is an association between the categories of students (Australian and international) and the response pattern amongst all three sets of data, the weakest is that of the IT students group. Table 67 shows a summary of responses distribution amongst the three sets of data for question V.2.

Table 67. Distribution of responses to question V.2 between international and local students

	Overall Students			IT Students			Business Students		
	Aust	Intl	Total	Aust	Intl	Total	Aust	Intl	Total
Can't understand	3.2%	5.3%	4.6%	5.1%	5.2%	5.2%	3.0%	5.6%	4.6%
Hard to take notes	9.7%	40.4%	29.0%	13.3%	35.9%	28.3%	10.8%	47.5%	33.3%
Only if read the lecture notes	8.8%	14.9%	12.7%	18.4%	20.3%	19.7%	6.4%	14.0%	11.0%
No problem	78.3%	39.3%	53.7%	63.3%	38.5%	46.9%	79.8%	32.9%	51.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Count	373	636	1009	98	192	290	203	322	525

From Table 67 we can see that the gap in responses between Australian and international students was the smallest for almost every option of this question. This implies that the issues faced by both categories of students may be similar, and could be due to the fact that material presented in IT courses is generally more technical than that of Business or other disciplines.

6.4 Difficulties of Asian international students studying in Australian universities and how to be a successful learner

Most graduates think that reading textbooks is very important for them. In fact, the lecture notes and the content that teachers deliver in class are inadequate to totally understand a subject. They also think that a good textbook should include some real life examples.

As to teaching method, the students do not like big lectures in which the teacher simply stands and reads the lecture notes. They think the same teaching method should be applied to all local and international students. For example, one graduate said, *"I think the teaching methods for all students should be the same. Maybe lecturers need to pay more attention to speaking clearly so a whole class of international students can understand, but that is not a problem. In India, the teaching method is different. Multicultural means you need to learn about other*



countries peoples. Personally, I find the teachers need to teach the same due to multiculturalism”.

None of the international graduates asks questions in class often. For example, one of them said, *“I am very shy. Sometimes I go to the lecturer directly to ask questions, but not usually in class. In India, we don’t really ask many questions in class, maybe it’s more of a cultural thing, as well as the fact I’m shy”*. However, they support the notion that it is necessary to encourage students to ask questions in class. Moreover, they all think it is important part of learning for students to actively engage in classroom discussions.

The international students have been involved in many assignments and believe it is an important leaning method. For example, one of them said, *“There are some advantages in group assignments. When you work in a group, aimed at an issue, it will help you broaden your ideas and your knowledge because everyone in your group will have their own opinions. When people work together and when you discuss with your group members, you will all gain a more comprehensive understanding on the issue”*. However, they are satisfied with the current number of group assignments and do not need more. They have the same attitude to presentation. The main problem of presentation for them is language.

When talking about system management in Australia, the students like the credit point system very much. However, with regard to referencing systems and selecting subjects, these students have some problems when they commence study in Australia.

The language problem is the main issue for almost all international graduates when they begin their study in Australia. However, they do not feel it is hard to communicate with their fellow students and lecturers, despite the fact that their English is not very good in the beginning. Generally, they are satisfied with what the university has done to help them improve their English.



7 Guidelines for Australian Universities and Lecturers

Our studies have identified various issues in the perspectives of teaching content and textbooks, teaching and learning methods, education management systems, language, culture and environment. It is recommended that Australian universities pay more attention to the following issues to improve the learning and teaching practices of Australian universities in consideration of an increasing international student cohort.

We suggest an extended value chain concept could be applied to teaching and learning practices in Australian universities. An extended value chain includes three parts: an upstream part, internal part, and downstream part. Under the upstream part, teaching and learning activities focus on activities of preparing international students for their Australian dream. The focus of the internal part is on teaching and learning issues after they arrive in Australia. Long-lasting relationship building and life-long learning are some important goals in the downstream part.

7.1 Teaching and learning should start before international students arrive at their classrooms

Pre-study preparation

International students should be well prepared for studying in Australian universities before they start their study. One important aspect is to have an adequate level of English skills. While having acceptable results in an English test (i.e., IELTS, TOEFL) and other relevant tests e.g., GMAT for MBA degree, GRE for science and engineering degrees) is essential, it is only a starting point. Many other things can be considered and done to better prepare them. For example, Asian students, especially Chinese students and students from other Asian countries whose official/working language is not English, could possess quite good English reading and writing skills, but lack listening and speaking skills, which only can be developed in an English-speaking environment. Such an environment is very difficult to find in those non-English speaking Asian countries. On the other hand, students coming from countries such as Malaysia, India, Singapore, Philippines, and Hong Kong normally have better English skills (especially speaking and listening) than those students from non-English speaking countries.

Assistance with culture shock

Apart from the language problem, our study finds that another significant difficulty for international students is the culture shock. Most international students come from a cultural background and education system which are significantly different from Australia. Familiarising themselves with the university environment and the social environment could be time-consuming and a daunting task for many international students when they start their study. In addition, for some international students the feelings of loneliness and helpless, as well as homesickness, could dramatically distract them from their studies in the beginning stage of their Australian life, especially for undergraduate students, most of who have never left their parents or country before.

One key challenge for international students is to understand and adapt to the Australian way of teaching and learning, including issues such as teaching content and study materials, teaching and learning methods, and education management systems. For example, textbooks and teaching materials including lecture notes, extra readings and extra practices in China (particularly for under-graduate students) are basically prescribed and prepared by teachers and lecturers. Those textbooks and teaching materials are the bible for students. Many students will cram those study materials before the final exams, and attending the weekly classes is



perceived by them as something insignificant. However, local students may use study materials for key terms, key theories, case studies, practices, and treat them as reference materials, since they have been used to the idea of looking for their own information and ideas since childhood, which is not the case for Chinese students who have grown up in an environment that emphasises rote learning and spoon-feeding.

Another dimension of the differences in teaching and learning practices between Australian and Asian universities lies in the differences in culture. In the Asian culture, students greatly respect their teachers and lecturers. There is a saying in Chinese “being my teacher once is being my teacher all my life”. The majority of successful graduates will greatly respect their teachers and lecturers all their life. They believe in such things as “when you can drink water, you should never forget where the water comes from”. Furthermore, there is a common view in Chinese culture that teachers and lecturers know more than students do. Such a view could come from the old belief of “among all career paths, study is the best way”, which has been seriously challenged since China embarked on economic reform in 1979. As a result, Chinese students normally accept what is said and given by teachers and lecturers. Challenging teachers’ and lecturers’ views is not on many students’ minds. Logically, many Chinese students feel more comfortable with a teacher/lecturer-centred approach but not with the student-centred approach which is appreciated by the local students.

Cultural differences could also explain the unwillingness of many Chinese students to participate in class discussions. Another cultural factor is the importance of face to the Chinese. Many Chinese believe on many occasions that “Silence is golden” - if they are not so sure what they are talking about or are trying to save others’ face, they prefer to listen carefully with two ears and watch closely with two eyes before they open their only one mouth (in other words, they believe in “listen more, watch more and speak less, since human beings have two ears and two eyes but only one mouth”). Of course, language ability and/or confidence in their language ability also plays an important role.

Some issues in the perspectives of education management systems and teaching and learning practices could be attributed to the lack of experience of international students. Looking at students from Asian backgrounds, especially Chinese, quite a large number of them are the only child in the family, and this family (on both the paternal and maternal side) has been treating them as a prince or princess. Some of them have been spoiled. They have very limited or no experience of an independent life, and when they are at school or university, almost everything, from admission, enrolment, course and subject selection, accommodation, daily life, graduation, has been done or arranged for them by their parents and/or the school/university. They basically need to do nothing, or very little, when they commence their university life. Education is highly regarded in China. The majority of Chinese families will do everything and sacrifice themselves to support their children’s education. Such a phenomenon has very deep roots in Chinese culture. For many Chinese parents, a better future for their children is more important than their own future. At the same time, many Chinese have the notion that “in the first half of my life my family will take good care of me, and in the second half of my life it is my turn to look after my family”. As a result, being looked after by the family and getting financial support from the family when they are undertaking study is not unusual. Of course, in recent years such a notion has been challenged; many young people in China only want to receive help and caring, not to help their families and others. There also exist many Chinese who are independent and not interested in helping others. It is not a surprise that many Chinese students (especially undergraduate students) lack the skills to be independent at university and in daily life. Furthermore, Chinese students generally lack experience of group activities, which are not normal practices within Chinese education systems. In respect of group activities, Chinese culture could



offer both encouraging and discouraging elements. The encouraging element is that the family is highly valued in Chinese culture. Three or more generations living under one roof is considered a very good indication of harmony and happiness in the family. The discouraging element is the expectation of their children: “to be number one in the school/university” is common among Chinese parents. To enable Chinese students to successfully complete group projects, a balanced approach taking into consideration these two cultural elements would be appropriate.

Universities in Australia could start working on language challenges for international students before they arrive in Australia (even before they are offered a place in Australian universities). The authors/researchers would like to suggest a multi-channel strategy, which involves many relevant parties, and both technological and non-technological tools/solutions. Australian universities could work through their own overseas offices and staff, collaborate with their overseas partners (including agents, educational partners and other associated organisations), and work with graduates who return to their home countries or with graduates who are residing or working in the overseas countries.

In consideration of the issues raised above, we offer the following suggestions for Australian universities:

1. Produce digital (i.e., CD, DVD) and printed materials, such as academic skills booklet for first year students covering various perspectives of teaching and learning in Australian universities (such as the use of textbooks and study materials, student-centred approach, different credit points systems and course/subject selection processes, group activities), Australian culture and social environment information, university life in Australia, and some unique words and Australian English slang. Such materials should be distributed to international students in their home countries via the universities’ own offices and/or representations as well as agents and partners in their home countries.
2. Establish an online repository to store and distribute the information discussed in the last point. This repository should be available to everyone.
3. Operate academic preparation and orientation week programs in their home countries before they depart. Such programs could be run by universities themselves and/or through their overseas partners.
4. Use graduates in the home countries of international students to educate them on teaching, learning and living in Australia. The real life experiences of Australian graduates are much better and much more effective than other initiatives (i.e., all forms of publications and databases, various academic and orientation programs) in helping international students understand Australia and its education system.
5. Put in place mentor programs in the home countries of international students. Those graduates are very good mentors for students who are going to Australian universities to study in the home countries.
6. Provide assistance to international students before they leave their home countries through Australian university offices, representations and their partners, as well as via multiple touch points (i.e., fax, telephone, Internet, face-to-face, post, email, SMS). This assistance includes airport pickup arrangements (via working with internal staff and travel firms), accommodation booking (via working with internal staff and real estate agents), and banking services (via working with banks).



7. Arrange peer groups for those students who coming to the same city (preferably going to the same university) before they depart, so that they can have friends before they arrive in Australia. Such arrangements will be thought of highly by many Chinese students and their families, since they believe “while you are at home, you rely on your family; while you are away from your family, you seek assistance from your friends”.

7.2 Enhancing teaching and learning during study

These teaching and learning activities provided to international students before they start their study aim principally at increasing the students' awareness of teaching and learning practices and introducing them the way of studying and living in Australia. Many issues discussed in the previous section on perspectives of teaching content and textbooks, teaching and learning methods, education management systems, language, culture and environment become more obvious and need to be dealt with more specifically during international students' time studying at Australian universities.

In general, we suggest that Australian universities need to promote a new philosophy of teaching which combines both student-centred and teacher-centred teaching and learning approaches to deal with the increased international student cohort.

Some specific suggestions include:

1. Educate students on required academic skills via academic preparation programs and/or orientation programs and/or specific workshops and seminars.
2. Educate students on Australian culture, the social environment in Australia, Australian slang, and the Australian way of teaching/learning and living via academic preparation programs and/or orientation programs and/or specific workshops and seminars.
3. Provide mentoring programs to international students and recruit both local and international senior students as mentors. Ideally teams of mentors including staff, international students, and local students should be available to international students.
4. Ensure international students can settle down smoothly by providing various assistance and services through the combined forces of staff, senior students, students' families, communities and relevant parties (i.e., banks, real estate agencies, transportation authorities, fair trading departments, police, immigration departments).
5. Provide sufficient resources (i.e., staff and time) to offer adequate consultations to international students (especially newly-arrived ones) on understanding and applying education management systems in Australia (i.e., provide guidelines and recommendations on how to select subjects and courses). Staff working in those areas should be academics or general staff who have a very good knowledge of academic practice and procedure. In addition, lecturers should allocate more consultation time to new international students to help them adapt to the new study environment more quickly and smoothly.
6. Establish language and study skills assistance to international students via designated centres and staff, and actively promote those centres to international students. They should use learning assistance as much as possible.
7. Facilitate peer teams or study groups among students (ideally each



group/team should have both local and international students).

8. Encourage students to seek help from lecturers and peer students.
9. Lecturers should adopt and apply the concept and principles of experiential learning:
 - o Constantly adjust their teaching methods based on feedback, own observations and reflections, latest research findings, and information from other sources.
 - o Create an appropriate learning environment. Students learn best when they are exposed to the practice of what they learn. This involves lecturing on a concept or theory, reflecting on it and then practising it (i.e., via group case studies and class discussions).
 - o Always try to bring in innovations in teaching by way of designing conducive study guides and lecture notes to teach a particular unit, or use mixed teaching and learning approaches (i.e., a combination of lectures, class discussions, group case studies, group presentations, individual reports and group projects for on-campus teaching, and telephone tutorials, online tutorials, online discussion forums, workshops and communications via email for off-campus teaching). Lecturers should also be very keen to employ appropriate technologies (e.g., eLuminator, BlackBoard, online demons, web 2.0 applications and sites, short videos and movies, animated cartoons, intelligent software, among many others).
10. Provide students with good textbooks and study materials
 - o Should choose an excellent international textbook having good coverage of theories and examples of various firms or practices in different countries. Students would be more interested in and/or proud of discussing cases from their home country.
 - o If no suitable textbooks can be located, customised textbooks are an alternative.
 - o Good study materials, including lecture notes, study guides and recommended readings should be provided to students via electronic and/or non-electronic means. If possible, examples of past best assignments and sample exam papers could be provided to international students, especially those in their first year.
 - o Clear instructions on how to use different study materials should be given. An example is as follows:
 - I. All materials serve different (but complementary) purposes.
 - II. The study guide provides the key information and the flow of the subject.
 - III. PPT slides summarise the key concepts of topics (including key points of readings) and include some updated information that is too new to have been included in the study guide, as well as questions and cases for in-class discussions and activities.
 - IV. Present the textbook as the place where it is possible to find more thorough explanations of terminologies and more detailed information on concepts and applications discussed in the study guide and/or mentioned in the PPT slides. Also almost all the case studies and activities prescribed in the study guide are included in the textbook.
 - V. Readings present you with extra information which is not



covered (or not covered well) in the textbook and study guide.

11. Take a balanced teaching and learning approach

- o A combined student-centred and lecturer-centred approach should be adopted, especially for first year (or first semester/trimester) international students.
- o Students should be given sufficient training and opportunities to understand and learn about the student-centred approach.
- o Emphasise the importance of correct referencing practices and the consequences of poor/wrong practices.
- o Stress the importance of presentation, communication and interpersonal skills, and provide sufficient training to students, especially newly-arrived international students.
- o Students should be encouraged to participate in class discussions, which could be made compulsory. To facilitate and nurture their confidence in taking part in class discussions, lecturers should create an environment in which international students feel comfortable to express their ideas, for instance, by asking questions they can answer or are interested in, asking their opinions in relation to their background and experiences, continually communicating to them that participation and contributing to the class are what matter, not whether their answers are correct or are in line with those of lecturers or other students.
- o Students should be encouraged, if not required, to take part in group activities. Lecturers can assign groups; alternatively students can form their own groups subject to the approval of their lecturers. The groups (ideally less than five group members in each group) should be assigned relative to their experience, background, and the course they are doing. A sample of group composition is attached in the Appendix Table 1.
- o Literature, lessons learned and best practice on group dynamics and development should be provided to students. In addition, a suggested four-stage framework could be adopted, a sample of which is provided in Appendix Table 2.

12. Suggest that students pay full attention to lectures with questions and doubts arising from reading the study materials. They should only note some very important points during the class, and organise the notes based on memory of the lectures and own understanding immediately after the class.

13. Recommend to students a learning circle of reading, listening, questioning, understanding, organising, practising, critical thinking and writing.

14. Discuss with students the importance of having a plan in place and of prioritising their tasks.

- o If possible, universities should offer training and seminars on project management and stress management skills to all students.

15. Urge students to lead a balanced life while they are studying in Australia: study hard, have enough sleep, eat well, and exercise regularly.

16. Finally lecturers and universities should tell international students that they should relax and have confidence in themselves!



7.3 Teaching and learning continue after international students' completion of their studies

In this part of the extended value chain of international students' teaching and learning experiences in Australia, the aims are to build long-lasting relationships and life-long aspirations with Australian universities. Students are universities' assets; international students are Australian universities' global assets. Australian universities need to look after their assets very well throughout the extended value chain. Those well-maintained global assets will surely bring great benefits and returns to the universities in Australia with whom they have studied. Some examples include: effective marketing for Australian universities, future student sources (i.e., via graduates' further studies with Australian universities), excellent channels for diffusing teaching and learning practices and outcomes of Australian universities, and an enhanced profile of Australian universities, among many others. Some specific strategies are presented as following:

1. Provide various assistance and information on staying in Australia (both living in Australia and pursuing further studies in Australia) and returning to the home country.
2. Organise immigration and recruitment seminars for graduates by internal staff and relevant professionals.
3. Provide recruitment information in their students' home countries.
4. Establish good links with associations of Australian universities graduates in different countries and provide such access to international students who are returning to their home country.
5. Establish good relations with job recruitment agencies in different countries and provide such access to international students who are returning to their home country.
6. Set up strong links with Australian employers and recruitment agencies, and recommend international graduates to them when they are looking for candidates in the home countries of those graduates.
7. Develop communities of graduates of Australian universities (could be one for each university). Such communities could be virtual or physical. Regular virtual and face-to-face gatherings should be organised by Australian universities, and senior staff of those universities should attend these gatherings to make them more meaningful and prestigious.
8. Establish good relations with Australian government agencies (especially those that have offices in overseas countries) and the governments of overseas countries where there are graduates of Australian universities.
9. Keep in regular touch with all graduates via multiple touch channels (i.e., emails, birthday cards, news on the developments within the university, new course information).
10. Regularly survey their further study interests (could be both degree studies and professional interests). Australian universities need to endeavour to encourage their international graduates to pursue life-long learning and not to forget them).
11. Utilise international graduates to train newly-enrolled international students (especially before they leave for Australia), to promote Australian culture, and to diffuse the Australian way of teaching/learning and living.
12. Actively engage international graduates in marketing and promoting Australian universities in their home country (the most effective marketing tool is word-of-mouth: the positive experiences of those graduates are much better than our marketing campaigns).



13. Ask assistance from international graduates to enhance the profile of Australian universities. In some countries, Australian universities are perceived to be not as good or reputable as North American, British and European universities. While actively enhancing our teaching and learning practices as well as maximising international students' Australian experience is necessary, aggressively promoting successful international graduates in their home countries will dramatically change people's perception of the reputation of Australian universities. For example, the success of Dr Zhengrong Shi, who is a graduate of UNSW and the founder, chairman and CEO of Suntech Power - a leading world solar energy technology firm - has greatly enhanced the reputation in China of UNSW and the Australian higher education sector in general.

Appendix 7.1:

Table 7-1: Suggested Group Composition

Names of Group Members	Course	The progress of your study	Country	Working experience

Table 7-2: Suggested Four-stage model of Management of Team/Group Work by Referring to an Example of 12-Week Trimester of A MBA Subject in One of the Team Member's Universities

Feedback	Stage	Practices	Lessons Learned & Challenges & Issues	Planned Future Improvements
Feedback is constantly monitored throughout the term; and necessary adjustments are made as per the feedback.	Initiation (Week 1)	- Gain understanding of students' background (including culture, experience, study) - Discuss the importance of the group work in learning and working places - Inform them that there are group discussions and group case studies in each class; Ass 2 involves group presentation (during the class in Week 11) and group report (hand in during the class in Week 11). - Brief on the success factors of team/group work	- Students may not like the idea of group assignment. For many overseas students, teamwork is not very exciting since they are not used to it and not very sure about how to go about it. Some local students are not passionate about this idea as a result of their work and family commitments. - Some students have such perceptions of teamwork as low productivity, low efficiency,	- Conduct a Myer personality type test in the first class - Ask students to send me a page summary of their experience - Distribute a good paper on group dynamic and group development or how to work in a team - Ros has given me some stuff to read. I shall have a chat with her again on the best literature for students. - Discuss how to work with people from different culture and background in the first class - Discuss project management in the first class - Discuss the importance of communication in the first week



		▪ Suggest that they think about potential and favourable group members ▪ Ask students to talk about their experience and expectation of group work ▪ Tell students we are a big family for a term together; and your team is your small family in this subject.	negative impact on individuals' performance, etc.	
	Adoption (Week 2 and Week 3)	▪ Form groups and assign group members (4 or 5 students in a group), and inform students that formed groups are for both in-class activities and Ass 2. ▪ Tell students that groups and group members might change after Week 3 since the class will not be completely stable after Week 3 ▪ Start in-class group activities and case studies in Week 2 ▪ Survey students' feedback on group formation and group activities in Week 2 and Week 3. ▪ Work on establishing environment (i.e., encouragement, education, motivation) for team work and facilitating group discussion	▪ Overseas students tend to group together with their mates.	▪ Identify with team members a project/team leader for each group ▪ Form groups by taking into consideration multiple factors, i.e., background (including culture, language ability, gender), knowledge, experience, personality, work and family commitments, students' suggestions and requests, travel distance to campus, size of group, etc. ▪ Design a balanced (focusing on the balance of individual vs team performance and in-class participation vs off-class report writing) marks allocation system, i.e., 20 for individual assignment, 7% for class participation, 3% for group work journey, 10% for group presentation, 20% for group report, 40% exam, etc.
	Implementation (Week 4 to Week 6)	▪ From Week 4, students should be ready for the group work and can be expected to get used to it	▪ Issues and concerns will normally surface approx. a week before the presentation and	▪ Ask the project/team leaders to give me weekly reports of their groups' progress verbally or via email from week 6. ▪ Address any emerging



	11)	▪ Weekly group case studies and discussions from Week 6 to Week 10 ▪ Ask Ass 2 progress of groups each week from Week 6 until Week 10; and repeatedly tell them to get started as early as possible. ▪ Give them consultation time for group work and discuss issues in groups every week ▪ Encourage them to speak out about their concerns and issues in the class and/or as early as possible after the class. ▪ Encourage them to meet, both informally (have coffee or lunch or dinner together) and formally (case discussion and Ass 2 preparation). ▪ Ask them to try to deal with challenges and issues themselves within group before they ask for your intervention. ▪ Take necessary and firm action when it is time to do so - including splitting the groups; asking non-performing group member(s) to put in an individual report; putting the names next to the contributed sections in the report and in the presentation; even awarding 0 marks	due day since quite a number of students tend to make a last-minute rush.	issues immediately ▪ Provide more consultation to groups, especially groups with non-performing members ▪ Have more private conversation with non-performing members to understand their situation before any firm action is taken.
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		for Ass 2 in some extreme situations, etc.		
	Post-implementation review and assessment (Week 12)	▪ Discuss group performance with each group regarding the presentation and quality of the group report ▪ Provide each group with the advantages and disadvantages of its group work ▪ Ask them to discuss strengths, weaknesses, challenges and issues of each group from their perspective ▪ Talk about strengths, weaknesses, challenges and issues of each group from my understanding ▪ Ask them to provide suggestions on group work		▪ Ask each student to submit a two- page report on the journey/experience of his/her teamwork and allocate 3 marks (out of 100) for the report.



8 Guideline for International Students of Asian Background Studying in Australian Universities

International students should be well prepared for studying in Australian universities before they start their study in Australia. One important aspect is to have an adequate level of English skills. While having satisfactory results in an English test (e.g., IELTS) is essential, it is only a starting point. Many other things need to be considered and implemented to better prepare them. For example, Asian students, especially Chinese students and others of non-English background (i.e., the official language of their country is not English) could have quite good English reading and writing skills but have poor listening and speaking skills, which can only be fully developed in an English-speaking environment. They may still need a lot of practice to improve their English, especially their speaking and listening abilities. On the other hand, students coming from Asian countries such as Malaysia, India, Singapore, Philippines and Hong Kong normally have better English skills (especially speaking and listening) than those students from non-English speaking countries.

Apart from language problems, our study finds that a significant difficulty for international students is the *cultural shock*. Most international students come from a cultural background and education system which are significantly different from Australia's. Becoming familiar with the Australian tertiary educational environment and the social environment could be a time-consuming and daunting task for many international students. In addition, for some international students, feelings of loneliness and helplessness, as well as homesickness, could dramatically distract them from their studies in the beginning stage of their Australia life, especially undergraduate students, most of whom have never left their parents or country before.

Asian international students also face many other challenges, such as understanding and adapting to the Australian style of teaching and learning, becoming accustomed to Australian education management systems, and so on.

To help Asian international students to quickly familiarise themselves and get comfortable with the new study environment in Australian universities, we have developed this guideline to offer some useful advice to Asian international students on tackling their language problem and culture shock issues, as well as other learning-related issues.

The target readers of this guideline are Asian international students, especially those first year tertiary students of non-English speaking background. We also hope that the guideline provides useful information to those foreign students who are preparing to study in Australian universities in the near future, as well as Asian international students who are currently studying in Australian secondary schools or colleges.

This guideline is divided into three sections: Accommodate yourself to the Australian education system, In classroom study skills and on campus study skills.

8.1 Accommodate yourself to the Australian education system

Before arrival in Australia

Find out as much as possible about Australia before you leave your home country. If you can, talk to someone who has studied here before. With regard to English skills, you should keep in mind that passing the English test, such as IELTS, is not enough



for studying in Australian universities. You need be able to use English skillfully in your study.

Prepare to adopt new study methods/strategies

A student-centred teaching and learning approach is very common in Australian universities. In this approach, students play an important role in the teaching process. They interact with the lecturer/tutor in the classroom by frequently challenging the lecturer/tutor, asking questions and responding to lecturer's questions, and so on. Class discussion is another aspect of the student-centred teaching and learning method. Teacher-student (and/or student-student) interactions require good communication skills and excellent English listening and speaking abilities. An inactive student (e.g., who never asks questions, never responds to the lecturer's question, or keeps silent in class is thought to have a negative approach to the teaching session because he/she failed to make a contribution. By contrast, the teacher-centred approach requires little or no input or response from students. Asian students, especially those from Confucian-heritage cultural backgrounds, are used to the teacher-centred approach, and have no wish to challenge the lecturer/expert and express critical thinking. These students must try to adopt the new challenge of the student-centred teaching and learning approach in Australian universities.

Minimum English requirements

Generally, passing an English test (such as IELTS) does not mean that your English is good enough to deal with all learning situations/challenges in Australian universities. The following should be treated as minimum English requirements: your English should enable you to listen to lectures effectively, to respond to lecturer's questions in the classroom, to actively participate in class discussion, to write assignments and technical reports, to read texts at a reasonable speed, and so on. In other words, your English should be at a level that enables you to cope with classroom communication in all four macro-skills of listening, speaking, reading, and writing. Use a checklist on English proficiency to gain a better understanding of your weaknesses in English language. If any of the above four macro-skills is below minimum requirement, you should devise a study plan to combat such weaknesses.

Set small achievable goals

Language and cultural adjustment cannot happen overnight; it takes time and lots of practice. By setting smaller, achievable goals, one can see the improvement over time. For example, one such a goal could be "by week five I shall be able to understand 60% of what the news reader says".

Create the learning environment

The best way to learn a culture (and its language) is to live with the locals. Staying with an Australian host family will provide you (or force you) to learn the Australian way of life. While many students don't like the idea mainly due to the awkwardness at the beginning, they benefit from this lifestyle quickly and extensively. Survey data has shown that living with locals can dramatically improve international students' listening and speaking skills in a very short time period. For example, students could communicate easily with their Australian host family (or local housemates) after living with them for just one year or less.

Make an effort to make new friends, particularly of the local students. Our study shows that many local students are unwilling to work in groups with international students while many international students can see the benefits of working with local students. This means that international students need to make a greater effort to foster such partnerships.

Join study groups, study buddy

Students should recognise the importance of "collaboration" in learning and should join a study group or find a study buddy from the very beginning of their university



life. However, it is very important to point out that “collaboration” does not mean collusion or plagiarising each other’s work. Every student must attend at least one workshop in this area so as to gain a thorough understanding and not get into trouble as a result of “academic misconduct”.

Find a mentor, preferably an international student in a senior year

Many university departments now recognise the important role of the mentor and have set up programs to foster such relationships; students who are fortunate enough to be in those departments should take full advantage of such programs. Students whose university has yet to jump on this bandwagon should take the initiative to seek out a mentor themselves.

Use remedial classes if available

Many Australian universities run regular remedial English classes for students, particularly for international students who need help with their English language skills. In our study, some international students told us they didn’t use these classes because they didn’t know about them. While universities need to do more to market these courses, students should also make an effort to seek out valuable resources such as this in order to benefit from them.

Find out what help/resources are available

Apart from remedial classes, other resources or help may be available to assist international students in improving their English language skills. However, not all of these are advertised, hence students need to seek them out in order to benefit from them. Students should make a habit of asking rather than just assuming that they are not there. Being part of a network will also help in getting more information about resources or upcoming events that are useful to individuals.

You should also make your teachers aware of your language problem and seek help as soon as it is needed.

Do not overload study load

Some international students have the misconception that if they overload their study plan each semester, they will complete their course earlier. However, this is usually not the case. Students who have overloaded their study usually end up failing some of their subjects or have an overall poorer result. International students need to be aware of this fact before making any hasty decisions about their study plan.

Do not overload work commitment

Many international students pick up part-time or casual employment to subsidise their income. However, some students may unwittingly overload themselves with paid work and consequently neglect their study. It is therefore important for international students to understand that their focus should be on their study, even if that means managing on lower income during their course of study.

Attitude towards study

In some Asian countries the emphasis is more on getting into a university; once a place is secured, graduation is almost guaranteed. However, this is not the case in Australia. Students are expected to work hard to earn their degree.

University students in Australia are expected to be independent learners: that means they are required to plan and manage their study tasks and to ensure their work is submitted on time and meets a required standard. Local students who have gone through the education system here are usually quite accustomed to this and equipped to meet this expectation. However, for Asian international students coming from a more teacher-centred culture, this may take some time to adjust to.

Most Australian universities work on a semester system with each semester lasted



about 13~14 weeks (12 teaching weeks, with one or two weeks' break in between), plus one week for exam preparation and a two-week exam period. Given the short duration, it is important that students work hard from day one. However, some international students may not understand this, thinking that it's not crucial to attend some classes, particularly those at the beginning of the semester. This may result in students missing important information about certain assessment requirements of the subject, consequently leading to poor results.

8.2 In classroom study skills

This section presents some lecture-related classroom skills and advice, and tips for preparing an oral presentation.

(1) Lecture-room related study skills

Be present for lectures

Lectures are one of the main methods of delivering subject content at universities. Although a lecture may aim to achieve different outcomes, it generally provides a summary of essential knowledge in a subject area, demonstrates how to do something (e.g., solve a problem), stimulates your interest of subject topics, and guides your reading and research. Make sure you attend lectures regularly and listen carefully in all lectures – this will help you grasp the key concepts of the subject area, understand key theories and practise key techniques/skills required for assignments and the final examination.

The first lecture

The first lecture in a subject is one of the most important lectures of the semester. It usually introduces very important information about the unit/subject, such as unit coverage, scheduling, assessment requirement and assignment setting (e.g., assignment topics, mark distribution and due dates), and special learning requirements. It is with this information that students may plan ahead for specific learning events during the semester/trimester. For example, if two or more units have assignments due in the same week or on the same day, you may have to plan ahead and complete one of the assignments well before its due time. Make sure you do not miss out on this information or you may experience a number of difficulties during the semester.

The first five minutes of each lecture

It is essential to be in the classroom before the lecture starts: lecturers normally announce any useful information about the unit/subject matter of the week during the first few minutes of the lecture. This information may include updates to teaching materials, changes in the scheduling of tutorial or other teaching/learning activities, assignment global extension, assignment marking comments/feedback and so on. The information may have an impact on your weekly learning requirement, but it may not be included in the lecture slides. If missed, you may be unable to get it from anywhere else, unless you ask your lecturer/tutor or fellow students after the lecture. In addition, most lecturers will outline the purpose of the lecture in the first few minutes, and give you an idea of what they hope you might gain from the lecture. As such, it is strongly recommended that you be in classroom before the lecture starts.

Effective listening in lecture

Most international students from non-English speaking backgrounds feel it is hard to listen effectively to lectures. This is specifically true for first year international students from such backgrounds. To be an effective listener, you need to improve your concentration (i.e., maintaining motivation/focus), prepare for asking questions, analyse the message from the lecture, take notes and so on.

Improve your concentration when listening to lectures



There are ways of maintaining focus; for example, thinking about what the lecturer may say next, or considering the general point he or she may be making. You could also think about what has already been covered, and try to sum up the content in a few brief phrases. Sitting near the front of the lecture theatre is another way of maintaining focus. This will help you feel more involved and ensure that you can see and hear, as well as avoid possible distractions.

Avoid doing any other work during lecture, even if you think the lecture is boring. Listening to the lecture should be the sole purpose of sitting in the lecture session. It is costly to do any other activity during the lecture, such as catching up on uncompleted workshop/lab tasks, reading texts or doing assignments. By doing other work during lecture time, you have missed the opportunity to interact with the lecturer/tutor in learning the new content being presented, which in turn may result in taking you a longer time to catch up.

Ask questions and analyse the message

Consider what else you would like to know about the lecture content being presented, and put these questions to the lecturer, if appropriate. If there is no opportunity for questions, write out your queries for your own research, or for discussion with the lecturer at the end of the lecture.

Take lecture notes

The notes you take during a lecture should provide you with a summary of relevant and important points on the topic being presented. It is impossible to take down every word and detail that is presented in the lecture, and if you attempt to do this you will be unable to listen actively. It is always a good idea to do some pre-reading to prepare for the lecture and listen carefully to the lecturer's introduction. In this way, you will be more likely to identify the key ideas being presented. If much of the lecture material is available online or in your textbook, your notes should include minimal detail. If the lecture slides are also available from the unit website, a shortcut is to print the lecture slides beforehand and take them to the lecture as the basis of your note taking.

Listening or note taking?

There is a balance between effective listening and note taking. It is recommended that you take lecture notes only when your English is good enough to comprehend the lecture. Otherwise give the highest priority to listening. If you have difficulty in understanding the lecture content in some cases, try to work harder at listening and identifying the main points of the lecture. In any case, never give up on listening to lectures.

Asking questions vs. talking/discussion in classroom

Don't be too shy to raise questions in the classroom if you don't understand or if you need further explanation of particular concepts. On the other hand, it is a very bad habit to talk irrelevant topics with fellow students during the lecture. This not only shows disrespect for the lecturer but also affects other students who are listening to the lecture.

Revision after the lecture

Re-reading your lecture slides/notes, preferably on the day of the lecture, will increase the likelihood of you remembering the key concepts of the lecture.

(2) Oral presentation and related skills

Oral presentation is usually a final stage of a group assignment or an individual research-based assignment (see also "group assignment" in the next section).

Most students find it very stressful, even uncomfortable, to speak to a group of



people. This depends on their past experiences and expectations, both of themselves and their audience. A well prepared oral presentation will reduce such stress.

Structure your preparation

When preparing your presentation, you need to consider your audience (e.g., your fellow students, your lecture/tutor or invited guests) and the purpose for your presentation (e.g., is it part of your assessment, or a report of your research into some assigned topics?). With this information in mind, you may start to prepare your presentation, following a very simple structure, i.e., an introduction, followed by the main points and then a clear conclusion.

You also need to plan your talk, keeping in mind the time frame you have been given. As a rough guide, a 10-minute presentation would be about 500 words or two pages of a text document. If you use PowerPoint slides, allow 1-2 minutes per slide. It is considered rude and/or badly organised to go beyond the time limit.

PowerPoint slide design

Visuals add a tremendous amount of interest to your presentation, so plan them from the very beginning. (i) Think about which parts could be presented in what ways, e.g., headings, photographs, illustrations, charts, cartoons and the like. (ii) Ensure that each slide deals with only one main topic, presented in slide headings to add clarity to the talk. (iii) Use appropriate size fonts so that your audience can read effectively. The font size should not be too large, nor too small to be read by your audience. Well organised headings are an excellent way to provide signposts and enhance communication with the audience.

Before presentation

Check out the venue beforehand to determine what facilities are available. Determine ahead whether you can use computer-based technology, video and the like and make sure the items you need are in the room on the day of your presentation.

Your presentation notes should be well organised before your presentation. It's a good idea to use small cards with main points written on them and then talk to these main points. The cards should be numbered so that you can get back on track if the cards get out of order. If you use printed notes, again put the main points on one side only so that there is no turning over of pages with shaky hands!

During presentation

Use signposts to cue your audience, such as "I'd like to start by", "To conclude then", and similar phrases that signal the direction of your talk. A presentation that misses any steps in the structure confuses the audience.

Be aware of your body language and eye contact and practise your talk beforehand - either in front of an audience (a partner, friends, a family member) or in front of a mirror. It is essential to smile at your audience, introduce yourself and make lots of eye contact at the beginning. Try to make eye contact regularly throughout the talk. To do this, you need to know your material very well and have rehearsed and timed it.

Be ready to answer questions too. You can prepare by anticipating the questions people would be most likely to ask. If you cannot answer a question, it is acceptable to say so and ask if anyone else in the audience can help; often someone can.

Do not forget to conclude the talk and thank your audience at the end.

Other useful tips



- ❖ Expect to be nervous initially and plan for it. If you speed up under stress, slow down.
- ❖ If you speak softly, try to use a microphone, if applicable.
- ❖ Slow, deep breathing can calm you.
- ❖ Arrive early to test the equipment.
- ❖ Visualise yourself often presenting the talk confidently and successfully.

8.3 On campus study skills

(1) Group Assignments and Related Skills

Group assignment is one assessment method frequently used by many Australian teaching staff. This type of assignment encourages cooperation/collaboration among a group of students and simulates teamwork in a real world working environment. While working effectively with others can be a very productive and satisfying experience, it can also be a very challenging task.

Form assignment group

Your lecturer/tutor may assign team members for your group, or he/she may allow you to choose your own team members. In the latter case, you have the opportunity to choose with whom you will work. If you have never done a group assignment before, it is crucial to join a group that consists of both local and overseas students. The best choice could be a group with at least one local and at least one other person who speaks your own language (so that when you have difficulty expressing your ideas, on some occasions that student may be able to help or translate). Try not to form a group consisting of students only from your own country – otherwise it is quite likely you will speak in your national language, rather than in English, in your group assignment discussion/communication. Our study shows that most local students do not like to work in groups with international students due to difficulties such as communication and cultural differences in doing group assignments. Therefore, it is essential to make friends with local students thus making it easier to form assignment groups with local students.

Work effectively with group members

For groups to be effective, members need to work together to complete assignment tasks. The group must determine the most effective means of communication. While face-to-face meetings are generally the most productive, you are likely to find yourself using email, telephone or other means to correspond, for convenience. In addition, team members need to agree on how frequently they should meet in order to work successfully together. The contact needs to be frequent to maintain momentum, although exactly what this means depends on the scale and nature of the task. Good communication leads to a good dynamic within the group, avoiding the risk of some people dominating while others contribute little.

Team leader

If you take the role of team leader for your group assignment, you need do more to push the group “vehicle” and keep it running well. The following are some issues and tips to help you improve the dynamics of the group and get things done.

Get to know your group: You may work with local or international students from a diversity of backgrounds and interests. If you have not previously met the other members of the group, spend some time getting to know each other (e.g., invite members to talk about themselves and exchange contact details).

Get to know your task/s: Break any task into sub-tasks. Identify which parts can be done independently and which parts are interdependent. You should have an agreed approach in terms of steps to be taken and a time line to show what tasks should be completed when.



Resolve problems: Working in groups can be difficult, as interpersonal issues can arise. For example, some of your team members may have been accustomed to working in a competitive rather than a cooperative learning environment. On the other hand, some team members may not contribute. In such a case, you should try to find out why he/she is not being productive. Some people are very shy and need positive encouragement. They may be stuck and require some help and direction. Students may find certain tasks very challenging, so identify each other's strengths and utilise them in the group.

What if a member dominates during group/assignment discussion? If someone talks too much, suggest setting time limits in order to give each member a chance to speak. If a member of the group is dominating, you can politely point out that time is limited and refer to the ground rules.

Work together: One of the most difficult tasks in a group assignment is creating flow. Allocate someone to the role of putting the document together and allow them scope to edit. Don't forget to leave time for formatting, proofreading, preparing tables of content and bibliographies and submitting the assignment. To be fair to the person undertaking the task, allow at least three days for this.

Just as with any team you will work with, some will function really well with apparent ease and some will not. Establish guidelines or routines clearly, be friendly, contribute regularly and inject some personality. You might just find that the experience of working in a group is one of the most valuable ways of preparing for your future career.

Make a contribution: Try to communicate with group members actively; take responsibility for the parts assigned to you, and ask help from fellow students if something is beyond your capacity.

(2) Individual Assignments and Related Skills

There are various types of individual assignments. While some individual assignments are short-term (e.g., weekly-based, daily-based or even workshop/lab session-based), the majority of individual assignments are long-term ones. They may span a few weeks, half a semester or even the whole semester. This section focuses on the latter case of individual assignments.

Understand the task

The first thing after you have received assignment document is to read it thoroughly and make sure you understand every sentence of the assignment description. If you don't understand any part of it or have doubts about any part, seek a clear explanation from your tutor/ lecturer.

Start doing the assignment early

Never start your assignment too late, especially when multiple assignments from different units/subjects are due on the same day (or during the same week). Try to complete a draft version of the assignment long before the due date, and leave it (i.e., a "cooling down" period) for a few days before you revise it again. The more revised versions you have, the better-quality assignment you are likely to produce (thus the higher the mark you may achieve).

Extension to an assignment

Tell your lecturer or tutor as early as possible (before the due date/time) if you have realised that you are unable to hand in your assignment in time. If you meet the assignment extension condition, e.g., health issues, you should apply for an extension of the assignment to avoid losing marks.



Avoid cheating and plagiarism

Australian universities treat plagiarism seriously. Be clear about the university rules governing cheating and referencing. In general, cheating is the inclusion of the unacknowledged work of another person. Plagiarism (presenting other people's work and ideas as your own) always risks a heavy penalty. If you are caught plagiarising, it generally results in a zero mark for part or all of the assignment, and a serious offender may face failing the unit or subject.

Make effort in your assignment tasks

Pay attention to not only those parts that apply key theory/skills covered by the unit/subject, but also those minor requirements, such as structural/formatting requirements, submission requirements, etc. Never be careless about your assignment – if you don't care about your assignment, no one else will. The consequence of this will be losing marks unnecessarily, which may contribute to a poor final result for the unit or subject.

(3) Use Available Resources**Use wisely the available resources/materials provided**

It is important to be clear about the purpose of different materials provided to you. They all serve different (but complementary) purposes. Generally, the study guide provides the key information and the flow of the subject. PowerPoint slides summarise the key concepts of topics (including the key points of readings) and include any updated information that is too recent to have been included in the study guide, as well as questions and cases for in-class discussions and activities. The textbook is the place where you can find more thorough explanations of terminology and more detailed information on concepts and applications discussed in the study guide and/or mentioned in the PowerPoint slides. In addition, almost all the case studies and activities prescribed in the study guide are included in the textbook. Finally, the readings present you with extra information which is not covered or only touched on in the textbook and the study guide



Appendix A:

The “at least one” questions for improving your English and studying performance:

- A daily check list for first year students of non-English speaking backgrounds:

- Have you talked to “at least one” local student, or your tutor, or your lecturer today?
- Did you sit in “at least one” lecture/tutorial session today?
- Did you respond to “at least one” question from a lecturer or fellow student in class today?
- Have you read “at least one” chapter/section/page of a textbook today?
- Have you reviewed “at least one” lecture today?
- Have you participated in class discussion today and asked “at least one” question?
- Did you show up to all lectures this week?
- Have you made adequate contribution to your group assignment?
- Have you completed scheduled weekly workshop/lab/assignment task/s?



9 Disciplinary and interdisciplinary linkages

This section presents a discussion of links between the project and other projects in the ALTC Strategic Priority Areas and also a discussion of disciplinary and interdisciplinary linkages between IT and business that have emerged as a result of the project.

9.1 Linkages with other ALTC projects

After searching through the list of ALTC funded projects, five projects are being identified as sharing the common themes of “inter-cultural” and “international students” with our project. They are:

- Investigating the efficacy of culturally specific academic literacy and academic honesty resources for Chinese students (<http://www.altc.edu.au/project-investigating-efficacy-vu-2008>)
- Addressing the on-going English language growth of international students (<http://www.altc.edu.au/project-addressing-ongoing-english-monash-2007>)
- Development and evaluation of resources to enhance skills in higher degree research supervision in an intercultural context (<http://www.altc.edu.au/project-development-evaluation-resources-macquarie-2007>)
- Assessing students unfamiliar with assessment practices in Australian universities (<http://www.altc.edu.au/project-assessing-students-unfamiliar-rmit-2005>)
- Enhancing domestic and international students engagement: changing attitudes and behaviours (<http://www.altc.edu.au/project-enhancing-domestic-international-melbourne-2008>)

To gain more information about other projects, a member of our project team, Kum Leng Chin, participated in a workshop facilitated by the team of the first project, “Investigating the efficacy of culturally specific academic literacy and academic honesty resources for Chinese students”. The workshop took place on 29th August 2008 and its purpose, according to the hosts, was “to gain insight into issues surrounding academic literacy and teaching Chinese students” from a ‘reference group’ of academics who had experiences in these issues.

About twenty academics from a number of Australian universities attended the full-day workshop. There were seven twenty-five minutes presentations followed by plenty of discussion time throughout the workshop. A number of important issues related to the teaching and learning of international students - particularly Chinese students - were raised and discussed at the workshop. These issues, which included academic literacy, communication skills, academic honesty and plagiarism, cultural impact on learning behaviour and much more, were highly relevant to our ATLC project. The sharing of some of the innovative and successful solutions to some of these problems was also very inspiring and encouraging.

This workshop has given us the opportunity to learn from other ATLC projects in similar research areas. It has also affirmed the significance of our study. Participation in this workshop has allowed us to draw on the experience and findings of related work so as to refine and enrich our investigation. Given the vast amount of interest being shown in our project at the workshop, we are looking forward to future possibilities in information sharing and research collaboration with the workshop



hosts, as well as with other participants.

9.2 Disciplinary and interdisciplinary linkages

This project involves two discipline areas across five universities. In particular, student participants of this study came from Information Technology (IT) and Business disciplines. Consequently the outcomes of this study have also given us some insight into the commonality and differences concerning cross-cultural teaching and learning from these two disciplinary areas.

Table 64 on pages 115 – 116 shows the comparison of correlation analyses results between overall students, IT students and Business students. In general, the learning difficulties/issues faced by international students were very similar judging from the statistics from the three sets of data. However, three exceptions arose from the comparison: 1) Reasons for feeling that the teaching methods of current subjects were not suitable; 2) Experience with credit-point systems; and 3) English language-related difficulties in understanding lectures. These were discussed in detail in Section 6.3. Recently, the results of our project have been communicated to both disciplines and we have jointly published papers. Further analysis on the differences between IT and Business fields will be conducted.



10 Results communication, publications and evaluation

10.1 Communications

Results of this project results have been communicated both nationally and internationally. Nationally, the following events had taken place:

- 1st workshop on Australian Learning and Teaching Council (ALTC) project (CG7-494), Edith Cowan University, 15-16 July 2008
- 2nd workshop on Australian Learning and Teaching Council (ALTC) project (CG7-494), Southern Cross University, 10-12 Sept. 2009
- UTS Teaching and Learning Forum 2008
- Curtin Teaching and Learning Forum 2008
- Workshop on "Investigating the efficacy of culturally specific academic literacy and academic honesty resources for Chinese students", 29th August 2008.
- Panel presentation/discussion in the special panel at the ACE2010 conference on the topic of "Internationalisation and Cross Cultural Issues in Computing Education"
- Public seminar entitled "Strategies and Approaches to Teaching and Learning Cross Cultures" on 29 Oct., University of Technology Sydney.

Internationally the outcomes of this project were presented in the following conferences:

- International Conference on Improving University Teaching (IUT), Vancouver, Canada, 14 – 17 July, 2009
- International Academic Conference on Innovation in Teaching and Management of High Education (ICITM 2009), 22-24 Dec. 2009, Malaysia.

And they will also be presented in the upcoming International Conference on Computer Supported Education) which will be held in Valencia, Spain next year, on 7 - 10 April, 2010

The comprehensive report with two sets of guidelines/suggestions will be communicated to academics and managers in related universities, and also relevant government departments, through submitting this report to universities and ALTC.

We have completed six papers for international conferences and forums to report our findings of this project and to obtain feedback from experts. We are completing another three papers for international journals and conferences.

10.2 Publications

This project's results have been and will be published in the following publications:



- 1) Kum Leng Chin, Jie Lu, Jun Xu, Jitian Xiao, Juan Yao (2009), Cross cultures teaching and learning: Some preliminary findings of an ALTC project. Presented at Teaching and Learning Forum 2009, Curtin University of Technology, 29-30 January 2009
- 2) Kum Leng Chin, Jie Lu, Jun Xu, Jitian Xiao, Juan Yao (2009), Cross-cultural learning and teaching in Australian universities. Presented at 34th International Conference on Improving University Teaching (IUT), Vancouver, Canada, 14 – 17 July, 2009
- 3) Jie Lu, Juan Yao, KL Chin, Jitian Xiao, Jun Xu (2007) Survey analysis on cross culture learning, UTS Teaching and Learning Forum Program, 14 Nov. 2007.
- 4) Kum Leng Chin, Lu. J, Juan Yao, Jun Xu, Jitian Xiao (2008), Strategies and approaches to teaching and learning across cultures. Presented at ALTC workshop: Investigating the efficacy of culturally specific academic literacy and academic honesty resources for Chinese students. Victoria University, Melbourne, 29 August 2008.
- 5) Jie Lu, KL Chin, Juan Yao, Jun Xu, Jitian Xiao (2009), Cross-cultural teaching and learning methodology analysis for asian students in australian universities accepted by International Academic Conference on Innovation in Teaching and Management of High Education (ICITM 2009), 22-24 Dec. 2009, Malaysia.
- 6) Jie Lu, KL Chin, Juan Yao, Jun Xu, Jitian Xiao (2010), Cross-cultural education: learning methodology and behavior analysis for Asian students in IT field of Australian universities, accepted by Twelfth Australasian Computing Education Conference (ACE2010), Brisbane, Australia; 18-22 January 2010.
- 7) Jitian Xiao, Jie Lu, KL Chin, Juan Yao, Jun Xu (2010), Challenges and strategies in teaching first-year Asian international students in Australian universities, accepted by Twelfth Australasian Computing Education Conference (ACE2010), Brisbane, Australia; 18-22 January 2010.
- 8) Jitian XIAO;Jie Lu;KL Chin;Jun Xu;Juan Yao (2010) Cross-cultural learning challenges and teaching strategies for first-year Asian students in Australian universities, submitted to CSEDU 2010 (International Conference on Computer Supported Education) which will be held in Valencia, Spain next year, on 7 - 10 April, 2010.

10.3 Evaluation

We undertook the formative evaluation in two ways. One was the evaluation done within the team; the other was conducted outside the team by experts. Within the team, for example, during the design of the questionnaires, team members first designed the questions, and then all others revised the questionnaires via email-based discussions and online document exchange. We also obtained feedback from outside the team to improve the outcome of the project in the following ways:

- Evaluated by experts

An expert in cross-cultural teaching and learning, Dr. Helen Lu from UTS, read through the report and wrote an evaluation report (attached).

Experts from the Technology & Education Design & Development Research (TEDD) Lab and the ELSSA Centre at the University of Technology, Sydney (UTS) provided feedback to this project.



Visiting Professor Javier Montero from Complutense University of Madrid (Spain) conducted an evaluation on this project during his visit to UTS in Sep. 2009.

Visiting Professor Xiaowei Yang from South China University of Technology Guangzhou, P.R. China conducted an evaluation of this project during his visit to UTS in Sep. and Oct. 2009.

Dr. Tiefeng Zhang has reviewed this project report and written an evaluation report during his visit to UTS in Nov. 2009

Dr. Ruijun Zhang has reviewed this project report and written an evaluation report during his visit to UTS in Nov. 2009.

- Evaluated by students

We showed the guidelines to some international students for their feedback and comments.

- Evaluated by colleagues

We showed the guidelines to some of our colleagues for their feedback and comments.

10.4 Success factor analysis

Analysis of the factors that were critical to the success of the project:

- 1) All team members of the project have experience of international students in their classes and also of being international students themselves during their study at Australian universities.
- 2) The involvement of multiple institutes across five Australian universities and across IT and business fields has provided a more complete picture to the issues faced by international students studying in Australia.
- 3) The project collected data from a large number of participants, with more than a thousand valid survey responses and over 50 interviews. This large amount of data provided us with a very rich insight to the problems investigated.
- 4) Different types of participants were involved in the project - international students, local students, lecturers and graduates. This has enabled us to capture all views on the issues.
- 5) Two contrasting yet complementary data collection methods - survey and interview - were employed in this project to ensure both quantitative and qualitative data were collected.
- 6) By drawing conclusions from both quantitative and qualitative analyses of the data, we were able to ascertain the validity of our study.
- 7) Student participants came from different study years and were majoring in different areas. This helped to reduce bias in the data collected. At the same time, there was a



sufficient number of students studying in a particular major, such as IT or Business, to allow us to conduct meaningful analyses on these groups of students.

8) The preliminary questionnaire and the pilot survey provided opportunities for revising the survey questionnaire before conducting the survey across five universities (for example, there was an opportunity to improve the quality of the survey questions and expand their scope/coverage, as well as to gain experience or an understanding of areas that might need attention when undertaking the survey).

9) We organised two main workshops, providing timely face-to-face discussion opportunities for all team members to work together on particular tasks and/or key issues, and to exchange thoughts/experience and get feedback.

10) Team members attended various teaching and learning forums and conferences, and also gave seminars to lecturers and students to obtain useful feedback to improve our outcomes.

11) We invited a set of researchers to review and evaluate this report and received very useful feedback.



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