Addressing the ongoing English language growth of international students

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Many additional resources are available in the accompanying Resource Document, available from www.altc.edu.au
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Executive Summary

This report presents the outcomes of The English Language Growth (ELG) Project, a large scale project conducted in five Australian universities in 2008-09 to address the ongoing English language development of international students from non-English speaking backgrounds. While these international students have a level of English deemed adequate for entry to university, as measured through: the International English Language Testing System (IELTS), the Test of English as a Foreign Language (TOEFL) or similar tests or experience, many students require further language development to be successful in their studies. The previous English language experiences of these cohorts of students vary markedly. Many have learned English after the so-called “critical period” and face maturational constraints: disadvantages that are augmented by cultural and academic adjustment.

The term “language growth” as used in our title Addressing the Ongoing English language Growth of International Students, although not used widely in the literature, was adopted to attract international students’ interest regardless of their skill level. Judging by the number of respondents, the choice of this title, we feel, was successful and seems to have related directly to their immediate concerns.

This study therefore focused on international students and the factors influencing the growth in their English language competence over time. The study sought to investigate the relationship between academic success and two factors affecting language development: 1) language and academic learning strategy use and 2) affective learning variables (e.g., motivation, anxiety, beliefs).

Using an online survey inviting both qualitative and quantitative responses, almost 800 international students provided a rich source of data. Students provided information on their attitudes, motivation and beliefs about language learning, their strategies for improving their language skills, and their strategies for academic learning. These data were correlated with the participating students’ grade point averages or similar academic measures. Many participants took considerable time and effort in responding to the survey’s open-ended questions, and a small number volunteered to be interviewed. These data enhanced the production of two further deliverables that have been generated through this project: a digital resource for students to advise them on what may/may not advance their academic success; and a resource for academics to assist with the teaching and supervision of diverse student cohorts.

The study provides evidence that a range of language learning strategies do not correlate well with academic success at this higher level. By contrast, involvement in more active (integrated and social) language learning environments—where students need to be resourceful with their language and instigate a degree of risk-taking—does show weak but positive correlations with academic success. Other issues were also raised by our participants. For example, many students reported the importance of cultural knowledge in order to understand and use English effectively.

Weak positive correlations were found for those strategies that promoted day-to-day interaction in English and risk-taking behaviours, such as inferring meaning from surrounding linguistic cues. Weak negative correlations were found for time-consuming strategies such as developing word lists and charts. There was a positive correlation between academic success and the provision of linguistic feedback on assignments, and a negative correlation with failure to attend lectures.
These findings have implications for universities’ policy-making, particularly with regard to addressing students’ social and cultural integration and the maintenance of their own identity in the face of a globalised educational environment. The findings also raise questions about the scope of internationalisation of the curriculum and establishing an appropriate balance between recognising students’ cultural backgrounds and developing their acceptance of Australian culture. A set of 16 recommendations for higher education institutions are proposed as a result of this study:

1. The findings from our study strongly suggest the need for learning environments to be supportive of students.

   **Recommendation 1:** For this to happen we recommend that both teaching and support staff work together to cater for the needs and interests of all students through being cognizant of the students’ backgrounds, opportunities, skills and understandings and by providing appropriate teaching and learning resources.

2. Related to Recommendation 1 is our finding that a key component of academic success is the need to develop deep level understanding.

   **Recommendation 2:** Therefore we recommend that teaching and support staff develop and provide learning opportunities and provide adequate and appropriate resources (in a timely manner) so that this can be achieved.

3. The value of the daily use of English by international students cannot be overestimated. However, students need opportunities for this to occur. Our study shows that many students are so overwhelmed with their academic workload that they are unable to take on this additional, yet effective, learning opportunity. Moreover, many courses do not allow time for students to integrate. Since the tutorial classroom is the environment that lends itself most to interaction between students, the importance of creating a relaxing and secure environment is fundamental. This means that non-native speakers’ contributions are not dismissed or ridiculed by other students. Codes of conduct or “ground rules’ can be set to ensure that all students’ contributions are valued.

   **Recommendation 3:** The project team therefore recommends that tutorial classes are used to enhance communication between students, over and above the traditional format of discussing subject content. Numerous ice-breaking games and interaction tasks are available online which can be remodelled to enhance content learning and communication and which can help interlocutors to relax and develop friendships. Some examples might be activities where students match terminology and definitions, activities where student groups recreate, in their own words, topic sentences or a new title from a reading, or where students work together on concept maps thereby developing their language as they negotiate and contribute to the creation of a map.

4. Following from Recommendation 3 is the value of social support groups and functions for international students. At the university level, it is important that funding continues for these activities. At the faculty, school/department, or course/unit level it is important that students are encouraged to join such groups where they can overcome anxiety with regard to speaking.

   **Recommendation 4:** We recommend therefore that lecturers and tutors are informed of social activities on their campuses and encourage their international students to attend. Social activities involving small unit enrolments are also an option. A list of clubs and societies and recommendations for membership can be part of the unit guide. Social
activities can be advertised on the unit or course website and students can be advised on the value of social learning strategies.

5. University support services already provide numerous orientation and study programs which are often poorly attended, particularly as the semester progresses. Most universities have responded to this with attempts to ‘embed’ academic support, however often these result in nothing more that ‘token’ responses to university policy allowing support staff ten minutes of a lecture to advise students.

**Recommendation 5:** We recommend that unit coordinators make a serious attempt at embedding academic support into their units. This can be done by working closely with academic skills development staff and with teaching and learning development staff at the curriculum development stage.

6. Following from recommendation 5 is the need for students to understand about learning, what strategies suit them, what strategies are available, and what strategies other students are using. This is a further role for learning advisors, but also one that can be taken on board by academic staff.

**Recommendation 6:** The project team recommends that students’ meta-learning knowledge (or metacognitive strategies) be developed. This can be done with information on and/or links to learning strategy advice on unit or course websites and in unit guides. It can also be the subject of discussion in an early tutorial. The CD ROM which is produced as a resource from this project can also be used to develop students’ understanding of “how to learn”.

7. Preparation before classes/lectures and attendance at classes/lectures was linked to academic success in our study. Also significant was good organisation with regard to getting assignments done early. There is clearly a need for staff to carefully construct their material so that students can adequately prepare before class, and that they construct their classes in such a way that students are motivated and understand the need to attend.

**Recommendation 7:** We recommend that academic staff provide sufficient guidelines so that students can prepare for classes and also that their resources are constructed in such a way that students’ time management skills can be developed. For example, with online learning management systems, students can demonstrate that they have already begun preparation for an assignment by submitting an abstract or plan. Reminders can be generated for those students who have not achieved these interim goals and support can be recommended and/or offered.

8. Our research found that making connections with prior learning is important for academic success.

**Recommendation 8:** We recommend that academic staff (continue to) provide explicit ways for international students to connect the new knowledge of their units with their prior experiences.

9. International students in our study recognised the importance of learning about Australian culture in order to understand and operate in Australian English and society. At the same time, many would like to have their own cultural experience and expertise acknowledged.

**Recommendation 9:** We suggest that internationalisation of the curriculum involves a two-way process whereby academics explicitly demonstrate and compare the cultural components of their discipline areas on a local and on a global scale.
10. This study highlighted the importance of affective variables in student learning. Several beliefs showed some small relationship with academic success, the importance of cultural understanding for improved English, and the belief that one’s speaking should not be hindered by making mistakes.

**Recommendation 10:** We recommend that academic and support staff develop a greater awareness of the impact of affective variables on both language and academic learning and consider that these are not only the purview of the various counseling services. Numerous stresses confront international students and these can result in loss of motivation and a fall in academic achievement. We believe that the responsibility for maintaining students’ motivation lies very much with the university as a whole.

11. In our qualitative findings students expressed concern about their listening abilities, particularly in the face of the range of accents they meet in an Australian higher education context. In terms of lecturing, it is generally felt that it is the obligation of the lecturer to make him/herself understood. This responsibility can be enhanced through the use of resources such as lecture notes, recorded/videoed lectures, podcasts and online powerpoints, and visuals.

**Recommendation 11:** The project team recommends that lecturers take steps to ensure that students understand the content of the lectures. This can be done by speaking clearly and at a pace whereby notes can be taken, avoiding colloquial speech, explaining analogies and metaphoric expressions, providing objectives and alerting students to each objective as it is addressed, and using directive discourse markers. It is also beneficial to provide rest points at approximately 20 minute intervals.

12. An important finding in our study was a significant relationship (although weak) between academic achievement and receiving marks for good English in assignments. Obviously good English expression will enhance any grading of a written assignment, but this result suggests that if students’ awareness of the value of their English is judged, then better results will occur.

**Recommendation 12:** Our team therefore recommends that assessments include marks for English. We are aware that many academic staff are reluctant to judge the quality of English in their students’ assignment, feeling untrained to do so. However, the combination of clear organisation, affective cohesion and coherent argumentation will render a better mark regardless of the assessor’s skills and it seems that knowing this has a relationship with students’ efforts.

13. Our results support several other studies - highlighting the importance of adequate reading skills for academic success. Because reading at university is not an activity which is observed, in contrast to the writing that is generated from it, there is a tendency to leave students to their own devices. Moreover, when the importance of reading is stressed, it invariably carries the message of reading more, and more widely, regardless of students’ skill levels. The relationship between reading and subsequent writing is important. Without adequate reading skill development we create in students an instant dependence on the very words of a written text – we set them up to plagiarise.

**Recommendation 13:** The project team therefore recommends that additional focus be placed on developing international students’ reading skills. For example, the deconstruction or analysis of a prescribed reading can be the topic of a specific workshop/tutorial, reading groups can be set up, and annotations can be added to a text, as some simple examples.
14. Our research highlights the advantages of developing students’ reading to the point where they have the ability and confidence to infer meaning from the context. Many students are arriving at university with an ongoing reliance on dictionary use which makes reading and writing time-consuming and often inexact. The enhancement of reading skills as recommended in No 13 above, will go some way to breaking this dependence.

Recommen(dation 14: In order to enhance students’ inferencing skills, it is recommended that students are introduced to terminology in context rather than simple word lists/glossaries, although lists of content terminology should be readily available as part of the course materials. Unit guides can also recommend the use of Learner’s Dictionaries and staff can ensure that these are available for purchase in university bookshops.

15. Following from Recommendation 14 above, is the importance of information literacy. Academic staff frequently expect students to master the information technology of a modern university library early in their studies. Library staff provide valuable support by way of orientation tours and classes. Somewhere in between these two vectors is the students’ need to develop an adequate vocabulary in order to successfully utilise the electronic facilities available to them.

Recommendation 15: We recommend that both academic staff and academic support staff explicitly teach the concepts of ‘keywords’, ‘searches’, ‘databases’, ‘electronic journals’, ‘electronic resources’ and so forth. Additionally, we recommend that unit guides provide keywords and nominated databases with instructions for access along with assignment task instructions.

16. Numerous students reported difficulties with spoken language, in particular their concern at having inadequate oral communicative skills to make friends or to contribute to tutorial discussions. Given universities’ promotion of dialogic learning environments wherein critical discussion is promoted, it is of some concern that many international students cannot benefit from this learning. Several participants explained that their prior language learning had been heavily biased towards traditional grammatical instruction and translation providing little or no opportunities to converse in English.

Recommendation 16: It is suggested that universities reconsider the weighting of their entry requirements (e.g., IELTS, TOEFL, etc) in favour of higher level spoken English requirements. This may go some way to enhancing international students’ cultural and social adjustment and increase their involvement in the academic communities of their disciplines.

A further deliverable from this project is the development of a CD ROM as a resource for students and staff for free distribution to international students at the five participating universities. This resource is also available at www.elg.edu.au.
1. Introduction

The project findings reported in this document have been generated with support from a two-year grant from the Australian Learning and Teaching Council (ALTC). The study encompassed five Australian universities: Monash University (lead university), Edith Cowan University, The University of Melbourne, Macquarie University and Deakin University. This group represents a cross section of Australian universities in terms of region and ranking.

There has been ongoing concern at universities across Australia about the English language proficiency of many international students. This concern is linked not only to the entry levels of proficiency but also to the exit levels. These concerns also impact in the broader workforce community. For example, Birrell reports that at least a third of overseas students scored below the level normally required for employment as professionals in Australia when applying for permanent residence visas. Many universities, or private providers aligned with them, offer preparatory English courses to attempt to bring international students’ language skills to a level where they can adjust rapidly to the heavy literacy demands of their academic study. Nonetheless, not every student will have the time, inclination, or financial resources to attend such classes and many will enter university unaware of the further English language growth that is required in order to achieve in their studies.

International student enrolments at Australian universities represent a considerable source of revenue for Australia and for its universities. Moreover, universities have come to depend on this revenue as public funding has diminished. In November 2009, 203,955 international students were enrolled in higher education institutions in Australia (Australian Education International 2009) and in 2008-09 the higher education sector alone (excluding the VET and ELICOS sectors) generated $9.5 billion in export income (57.1 per cent of total on-shore earnings) (Australian Education International 2009). The importance of international students and, by extension, their study experiences, for the higher education sector cannot be underestimated. Nonetheless, although Australia enjoys a high standing internationally in education provision—and while Australian universities are increasingly embracing globalisation and recognising the importance of satisfied graduates as effective ambassadors of their institutions—the negative experiences of international students continue to attract the attention of the media. Indeed, the media regularly publishes signs of the growing dissatisfaction of this student cohort (e.g., Deumert, Marginson et al. 2005).

It is possible that international students’ dissatisfaction with their learning experience in Australia is influenced to a significant degree by socio-cultural and language factors, as well as educational issues. Anecdotal evidence suggests that international students are hindered in their learning by isolation, by communicating mainly in home-language groups, and by a propensity to rote learn instead of attending or actively participating in lectures and tutorials. The latter suggestion is based on the stereotype of students from Asian backgrounds as surface learners or rote-learners, a perception that is now widely questioned (Watkins and Biggs 2001). Given our ethical responsibility to provide all students with equitable education outcomes, this project sought to investigate how international students can improve their English language competence, and whether there are particular learning strategies that place students ‘at risk’ or others that can enhance their opportunities for academic success.
This project is based on the hypothesis that more attention to the English competency of students throughout the course of their study will provide greater student satisfaction and more able graduates for the workforce. Our focus has therefore been directed towards the ongoing English language growth of students. Because this is not recorded in any direct or systematic way but may be reflected in students’ achievement, we surveyed students to capture their strategies for continuing to develop their English language skills together with their academic skills, their motivation for doing so, and their beliefs about language learning and their own abilities. These data were then correlated with Grade Point Averages (GPA) to ascertain whether any particular strategies, beliefs or language behaviours were significantly linked, either positively or negatively. We surveyed students at all levels of study—undergraduate, postgraduate (coursework and research)—across the five participating universities and both quantitative and qualitative data were collected as the survey instrument contained open-ended questions for each section. A number of students also volunteered to be interviewed.

In addition to this report, the project has developed a CD ROM resource, where the findings of the study are presented to students and staff in an easily accessible and attractive mode. Containing five modules of instructional material, the resource provides advice on those strategies that surveyed students have found helpful in improving their English language skills. This information is also informed by the literature and is presented with voiceovers, videos and downloadable strategy checklists in PDF format. A further deliverable from this project is a staff resource to raise the awareness of the language needs of international students and includes suggestions from staff interviews and from a thorough review of the current literature on creating learning environments that enhance students’ academic learning as well as their English language growth.

This report begins with an overview of the project (methodology and instruments). Next the findings of the quantitative and qualitative analyses are discussed and then a range of recommendations are proposed. The report concludes with a brief overview of the student and staff resources and links to the ELG website where the material is available. Copies of all survey instruments are provided in the appendices, along with extended extracts from the qualitative data provided by students.

We hope that the deliverables will assist both staff and students in developing a proactive approach to ongoing language improvement and, by extension, academic enhancement.
2. Literature Review

Studies of the impact and experiences of international students in Australia and in other western countries abound. General topics in this area of research are wide ranging and many are linked to achievement, implications for teaching and support, and subsequent financial and social impacts. The following diagram summarises the different areas of concern addressed in the literature.

This review will focus on **adjustment** (social, cultural, academic), including adjustment to the demands of tertiary literacy (critical thinking, discourse communities, academic honesty, information literacy); **general learning approaches** (deep, surface, strategic) and **strategies** (social, cognitive, metacognitive); **affective variables** in language learning (motivation, beliefs, attitudes, self-efficacy, anxiety); and **specific language skills development, proficiency and strategies**. Much of the review is summarised here and more detailed discussion on each element is provided in the Appendices.

**Adjustment and Acculturation for International Students**

Both socio-cultural and academic adjustment have been identified as major factors in student success. Each of these have a number of elements.

**Socio-cultural adjustment**

The socio-cultural adjustment of international students has attracted considerable research, both in Australia and elsewhere. A major area of focus has been students’ adjustment to western society and academic practices and the subsequent impact on academic achievement. Andrade’s (2006) excellent review of this literature includes comparisons of local and international students’ adjustment to university; academics’ and students’ perceptions and insights; and international student support. Andrade concludes that the variables affecting adjustment and which subsequently link to achievement are “language proficiency, study habits, educational background and personal characteristics” (p.143). The need for support of international students’ sociocultural adjustment to higher education in a new country has been studied empirically by Bartram (2007). Bartram’s research with students in a degree program—delivered jointly by universities in England and the Netherlands—shows that the
sociocultural needs of this cohort, and their demands for support, are not limited to the first/transition year, but are of concern throughout the study period. He concludes that:

… it is certainly worth acknowledging the tension that may exist between pressures and demands to support students who quite clearly face particular challenges and the will to develop self reliant, self-directing, and independent learners in the humanist tradition that underpins the HE tradition in countries such as England and the Netherlands (p.213).

Examples of socio-cultural stress addressed in the literature include: acculturative stress, cultural differences, high expectations, inadequate language proficiency, incorrect preconceptions of the host country, maintaining cultural identity, loneliness, low levels of social support and culture shock. These are all discussed in more detail in Appendix 1.

**Academic adjustment**

Apart from new cultural and social parameters, international students are frequently confronted with new teaching and learning experiences in Australian universities and western universities generally as they are ‘inducted’ into the ‘discourse communities’ of their disciplines (see Swales 1990; Swales 1998). Many are unfamiliar with critical discussion and analysis, with developing an argument in their writing, with the notion of research and inquiry (Rochecouste 2002) or the skill to synthesise the literature in their field of study (Rochecouste 2005). “Literacy”, a very broad term, is addressed in this report firstly in terms of acquiring tertiary literacy of the level of English required to perform adequately at university level, and secondly as information literacy or acquiring the linguistic and research skills required to seek out and identify relevant information in a modern library context.

Examples of academic adjustment issues are: information literacy, the dialogic communication patterns in the classroom, oral participation, the amount of English spoken in class, and the quality of participation in group discussions (See further Appendix 1).

**Learning Approaches**

The study of approaches to learning has attracted many scholars who are especially concerned with learning in higher education. Early descriptions of learning contrasted *rote* learning with *meaningful* learning (Ausubel 1968), *generative* learning with *reproductive* learning (Wittrock 1974), *deep* learning versus *surface* learning (Marton and Saljo 1976; Biggs 1987), utilising, internalising or achieving approaches to learning (Biggs 1978), *deep and elaborative processing*, fact retention and methodical study (Schmeck 1983), and *transformational versus reproductive* (Thomas and Bain 1984). Biggs describes the deep learner as one who is interested in the task and gains enjoyment from it, who actively intends to learn, who searches for inherent meaning (e.g., the author’s intention), who personalises tasks with their own experience, who links to prior knowledge and integrates parts into a whole, and tries to generalise (theorise) and look for hypotheses. The surface learner on the other hand sees a task as a demand to be met or even an imposition on their time, sees component parts as discrete and unrelated, worries about the time spent on a task, avoids personal meanings, lacks an intention to learn, and relies on memory by reproducing words, diagrams, etc (see also Entwistle 1987). Other scholars have observed that there is a place in academic study for rote-learning and memorisation, hence Biggs’ (1993; Biggs 1999) third approach to learning which is *achieving or strategic*. This type of student employs either a deep or surface approach depending on the type of task and its value.

There are several issues relating to learning approaches frequently discussed in the literature. These include: the role of memorisation, the importance of the learning cycle,
metacognitive awareness and academic self-confidence, the role of the medium of instruction, the role of task requirements and goals and the importance of critical thinking. The relationship between academic issues and non-academic problems, and cultural learning styles are also important factors mentioned in the literature (See further Appendix 2).

Affective Variables: Drivers of the learning approach

Affective variables form a complex group of individual differences in motivation, beliefs, self-confidence, self-perceptions, and anxieties which have been shown in an extensive body of research to have considerable impact on both second/foreign language learning and learning in general. In our study we have addressed in particular motivation, beliefs, self-perceptions and anxiety.

Studies of motivation are especially relevant to the present study as overseas study is a major enterprise and international students must be highly motivated to undertake it successfully. A number of studies are relevant here. Beliefs about a language, its culture and one’s own abilities in it have been investigated widely in relation to their impact on language learning. This research focus also has relevance for our study of international students and Bernat and Gvozdenko (2005) provide an excellent review of the role of beliefs in language learning. Anxiety among students in higher education has been widely recognised in studies of adaptation to new learning environments. According to Ryan and Carroll (2005), academic workload and task anxiety are augmented for international students by difficulties with language and differences in academic culture. Brown (2008a) shows that this complex of anxieties reported early after arrival had not lessened when informants were interviewed some six months later (also reported by Casado and Dereshiwsky 2001). Carroll (2005a; Carroll 2005b) reports that accommodating new ways will be harder for students with long held personal and cultural beliefs and may even be impossible for some (See further Appendix 3).

Language Skills: Proficiency and Strategies

A large proportion of research in the area of language skills and language proficiency investigates second language acquisition per se, i.e., ESL learners at all stages. Although much of this research is not representative of our students, who are assumed to have adequate English to commence study in an English speaking university, a considerable body of research does address the English language development of students once at university and is of course most relevant for our study. Research in second language development often addresses specific skills—reading, writing, speaking and listening, and occasionally communicative competence in general.

Scholars hasten to point out that there are many variables that will impact on a students’ language development or English language growth, as is the case with students’ overall adjustment to university. Storch and Hill (2008) for instance point out that “researchers need to look at factors in the broader educational context to explain students’ progress, or lack thereof. Such factors include, for example, the language background of fellow students in the class, and more importantly, the nature of the assessment work students are required to complete” (p.12).

Substantial research also exists for strategy use in learning in both academic and language learning environments but with our focus on the on-going English language growth of our student cohort, we will prioritise those strategies that are employed for language learning and language use within an academic context.

Extensive work on language learning strategies generally has been done since the early 1980s (Politzer 1983; O’Malley, Chamot et al. 1985; Oxford 1989; Oxford and
Nyikos 1989; O’Malley and Chamot 1990; Oxford 1990; Oxford 1994; Oxford 1994; Oxford and Burry-Stock 1995; Oxford 2003), although the concept of language learning strategies has been mooted since the seventies (see Rubin 1975; Stern 1975). Much of this research investigates the strategies used by good language learners, factors influencing the choice of strategies, and teaching of strategies to enhance language learning (e.g., Chamot and Kupper 1989; Chamot 1993; Rossiter 2003; Manchon 2008) as well as the development of several instruments to measure the use of strategies, for example Oxford’s (1990) Strategy Inventory for Language Learning (SILL). With the development of these instruments, strategy use could then be correlated with proficiency as measured in language comprehension tests, etc., to ascertain strategy effectiveness. The classification of strategy types has also attracted scholarly interest in the development of categories of social, cognitive, metacognitive, compensatory, collaborative, motivational (affective) strategies, and more.

The use of strategies by different age groups, cultures, genders, and for learning second languages is a further area to receive the attention of academic researchers (e.g., Mochizuki 1999; Nisbet, Tindall et al. 2005; Hong-Nam and Leavell 2006; Magogwe and Oliver 2007). Further studies have addressed students’ own perceptions of strategies and strategy use (e.g., Chamot 1993; Purdie, Hattie et al. 1996). Not surprisingly, many studies have found that language learning strategies are used significantly more by advanced and more proficient students (e.g., Yang 1999). Students’ preferred learning strategies may vary, with some favouring social strategies and others not, and males and females may even differ significantly in their use of language learning strategies (e.g., Bacon 1992; Green and Oxford 1995; Sheorey and Mokhtari 2001; Jiminez-Catalan 2003; Nisbet, Tindall et al. 2005; Hong-Nam and Leavell 2006; Pritchard and Maki 2006). Metacognitive strategies (those involving high level organisation and self evaluation) have been linked to students with greater motivation and more success in L2 development. A lack of affective strategies for regulating emotions, attitudes and motivation has also been associated with poor outcomes where students are separated from a learning group, as in distance learning (Bown 2006). Bown, as a result, links positive affective strategies to successful self-instructed language learning. Very thorough reviews of studies of strategy use are provided by Griffiths (2004) and by Rivera-Mills and Plonsky (2007).

Appendix 4 explores, in detail, the research that has focused on the difficulties that international students experience, as well as the strategies they use, in adjusting to the language demands of university study in the different skill areas—reading, writing, listening and speaking. We summarise these key areas below.

**Reading Skills Development**

Reading, an independent and private task, receives less research interest than those skills which deliver tangible and measurable outcomes such as speaking and writing. Although writing skills are widely taught by university academic support services, much less attention is given to the teaching of reading skills. This is unfortunate, given the need for extensive reading and synthesising of information before the writing process begins: indeed, at university adequate reading skills are fundamental to the success of writing in terms of recognising and extracting relevant content. Much of the research that does exist on the reading practices and experiences of L2 readers has found that they face daunting challenges in dealing with complex academic texts. Reid, Kirkpatrick and Mulligan (1998) found that non-native speaker (NNS) students faced particular difficulties with technical and discipline-specific vocabulary, denser writing styles and complex sentence structures, and “interpretative ‘gaps’ in the knowledge, experiences and assumptions they are able to apply to their reading” (p.71).
Writing Skills Development

Extensive study has addressed the writing skills of international students in English speaking universities, covering topics such as the impact of written corrective feedback (e.g., Bitchener, Young et al. 2005; Bitchener 2008; Bitchener and Knoch 2008), the contrast between general academic and discipline specific writing (e.g., Kaldor and Rochecouste 2002; Zhu 2004), and cultural and disciplinary differences in organisational structure (e.g., Swales 1990; Allen and Rochecouste 1997; Swales 1998; Kirkpatrick 2004; Rochecouste 2005). The specific writing difficulties of international students (e.g., article use, critical thinking, attribution, plagiarism, academic integrity) have also received considerable attention in the research.

Listening Skills Development

Difficulties with listening are among the first encountered by international students at an English speaking university, which is not surprising, since advanced listening skills are a major requirement in higher education as most knowledge is still delivered in a lecturing environment. To this end, several scholars have addressed listening skills and the experiences of university students. Vandergrift (2007) provides an excellent review of issues in L2 listening and includes consideration of cognitive and social factors that impact on listening as well as the role of perception skills and metacognitive knowledge. Vandergrift also covers the impact of new technologies on listening in multimedia contexts, of which little is still understood.

Numerous studies show evidence of large proportions of first and second year students having problems understanding their lecturers’ language and this includes both local and international students (Hutcheson and Tse 2004), however international students are more likely to also have difficulties in tutorials classes and continue to have them after the second year of study. This lack of aural understanding leads international students to read significantly more than the required texts (p.10), which in itself is not an easy task for them.

Speaking Skills Development

Many international students come to our universities from an educational background that has not encouraged verbal expression but has focused on the written product and grammatical correctness. This is particularly detrimental to these students’ successful communication once here and causes considerable stress and anxiety. Improvement in speaking skills requires interlocutors becoming available through tutorial discussion and social interaction. But as we have seen already, many international students face difficulties in participation in tutorials and developing social networks, giving them limited exposure to opportunities to communicate in English (e.g. Robertson, Line et al. 2000; Paulhus, Duncan et al. 2002; Wright and Lander 2003; Tani 2005; Fegan 2008). In the absence of this access, international students most often communicate only with their home-language groups, or if in English, to other international students. According to Tani’s (2005) student participants, this does not constitute an adequate learning environment.

Vocabulary Acquisition

Vocabulary knowledge is closely linked to all of the above skills. It determines the degree of comprehension in reading and listening, the degree of fluency in speaking, and the degree of originality in writing. Hence a considerable amount of the research literature addresses the process of second language vocabulary acquisition (For further details on all the above factors, see Appendix 4).
Measuring English Proficiency and Academic Performance

Naturally with the increased number of second language speakers at universities, there has been a strong interest in the measurement of the relationship between English language skills and academic achievement. A large number of studies have focused on IELTS, the most widely used measure of English language competency in Australian higher education. Some have found that overall IELTS scores have negligible correlation with academic achievement (e.g., Cotton and Conrow 1998; Dooey and Oliver 2002) or at best a significant positive but weak relationship (e.g., Feast, 2002, Phakiti, 2008), indicating that language difficulties are just one of many possible variables that affect students’ academic performance. Other variables suggested are motivation, cultural adjustment, welfare problems, and the amount of English tuition received after enrolment.

Andrade (2006) cites conflicting research by Berman and Cheng (Berman and Cheng 2001), which links difficulties with language to lower GPAs for graduate students but not for undergraduates. Andrade found no relationship between the Test of English as a Foreign Language (TOEFL) scores (the most popular test in North America) and GPA for either group. Contrasting this, a modest relationship between TOEFL and academic achievement (a measure including the GPA) was found by Stoyyoff (1997). Similar supportive relationships between measured English competence and academic achievement have been found by Johnson (1988) and Messner & Liu (1995).

A review of studies of the predictive value of the IELTS for academic performance by Phakiti (2008) showed consistent evidence of other contributing factors (e.g., Elder 1993; Hill, Storch et al. 1999; Kerstjens and Nery 2000; Huong 2001; Feast 2002; Woodrow 2006). Phakiti’s own findings support the view “that IELTS test scores do not 100 per cent guarantee that students are equipped with the ability to cope with study in higher education” (p.31). Very similar research findings have been reported for TOEFL (e.g., Vinke and Jochems 1993).

While overall IELTS test scores have not been found to be definitely or strongly correlated with academic success, numerous studies continue to show that certain skills in English do correlate with success. More robust results have arisen from the correlations of IELTS subtest scores (e.g., writing, speaking and listening) with academic achievement. For instance, Woodrow (2006) found the strongest relationship between speaking and listening scores and GPAs, and that there was no relationship between GPA and reading scores. This contradicts earlier studies by Dooey and Oliver (2002) and Kerstjens and Nery (2000) who found scores from the reading subtest to be most highly related to academic achievement.

Rambureth (2001) has demonstrated that strong writing skills among international students correlates with higher academic results. Feast (2002) emphasised in particular the impact of low IELTS writing scores in study programs where writing plays a critical role in assessment tasks. Feast concludes with a discussion of the impact of raising IELTS entry scores on international student enrolments. This question is taken further by Hirsh (2007) in discussing the question of whether receiving institutions should raise the standard English entry requirements as a means of improving students’ academic outcomes. His review of key recent studies on the issue of predictive validity of IELTS and TOEFL leads him to conclude that “variations in IELTS scores above the admission threshold are not a significant determinant of subsequent academic outcomes” (ibid, p. 197). Hirsh further notes that “it is important to indicate that neither the IELTS nor the TOEFL test claims or is designed to predict the subsequent academic performance for tests takers” (p.196).

Ingram (2005), as one of the original developers of the IELTS test, acknowledges the lack of convincing research into its predictive value. Ingram claims, moreover, that
Addressing the ongoing English language growth of international students

Problems with IELTS can only be solved by universities setting “realistic and appropriate proficiency levels for entry purposes” and that “these decisions about appropriate entry levels need to be made by people who understand IELTS and the implications of its levels” (Ingram 2005) and of what it does and does not measure. Nonetheless Picard (2007), who compares IELTS tasks with the requirements of a postgraduate research degree, argues that raising IELTS scores will not necessarily bring about improved academic performance or better written and spoken research communication. Competition between universities for attracting students has resulted in the lowering of English entry levels (or the creation of alternative entry pathways) in spite of the IELTS recommendation that “[t]he only [IELTS] band range where the English language level is considered ‘acceptable’ for all forms of study is 7.5 to 9.00” (cited in Bretag, 2007, p.14).

In considering also the measurement of academic performance, Sadler (2009) warns that the integrity of measures like the GPA - “a weighted mean of course grades calculated over a defined period of study” (p.811) - as a means of measuring and comparing academic achievement should not be taken for granted. He describes four threats to grade integrity: random error, bias, contamination of the object graded and inappropriate grading principles. A detailed discussion of using the GPA as a measure of academic achievement is included in Hunter and Pickering’s (2002) paper. They advocate using a ratio of the average GPA when benchmarking performance as a way of eliminating variability in raw GPAs (e.g., from year to year or across faculties) and to allow comparisons of equivalent groups in different institutions, even if they use different GPA scales (p.2).
3. Methodology and Demographics

This project was undertaken using both qualitative and quantitative research methodologies including interviews, open-ended survey questions and a detailed multiple choice questionnaire. It was undertaken in five Australian universities, making it an unusually large-scale study. These institutions included Monash University, The University of Melbourne, Deakin University, Edith Cowan University and Macquarie University. The project leaders and project manager were located at Monash and Edith Cowan Universities and the remaining eight research team members were located in the other universities. In addition, an advisory group consisting of a further seven people drawn from experts in applied linguistics and tertiary education leaders concerned with the internationalisation of Australian universities provided useful guidance throughout the two year duration of the project. The data from the research has been used to develop learning and teaching resources.

Participants

The participants of this study consisted of international students for whom English was not their first language, and from teaching and student support staff from the participating universities.

Students: From the five universities there was a potential cohort of approximately 60,000 international students. The student participants from this cohort were recruited by means of promotional posters, letters to appropriate student support groups and associated personnel. Volunteers were directed to the dedicated website that was developed for this project. During the course of the data collection period, the English Language Growth (ELG) website homepage received more than 11,000 hits and the student resources page 2,399 hits, demonstrating a high level of interest and need in this area.

All student participants were volunteers and their contributions were made via a lengthy online eight-part questionnaire (this involved mostly multiple choice questions, but also used open-ended questions) (See Appendices 5-9 for a copy of this instrument, along with introductory pages from the ELG website, selection criteria, information for participants and consent forms); participation in an online discussion forum (see comment about this in Procedure—Phase Two below); and interviews (see Appendix 10 for a copy of the student interview schedule and consent form). A total of 998 students undertook the online questionnaire, of whom 798 completed it in its entirety (Of the 200 who started but did not complete the survey: 15 proceeded no further than Section 1 or Section 2; 14 students completed to the end of Section 3; 31 Section 4; 19 Section 5; 1 Section 6; 1 Section 7; and 1 Section 8.)

In this report, we have only used data from those students who completed the full survey.

Although this sample represents less than two percent of the potential number of international students, the sample size is large and the general consistency in the pattern of responses suggests a suitable level of representativeness. A summary profile of the participants who completed the questionnaire is described below:

- There was a relatively even distribution of students from the five participating universities: Monash (n=189), Edith Cowan (n=161), Macquarie (n=156), Melbourne (n=154) and Deakin (n=138).
• The sample was relatively young (around 80 per cent aged between 21-30 years).

• There was some bias toward female respondents in the sample (61 per cent).

• Many of the participants had a Chinese ethnic background (52 per cent had a Chinese dialect as their first language). However, it should be noted that when a comparison of responses was undertaken, high F values suggest high levels of within group differences, suggesting that differences occurred for more than simply cultural and linguistic parameters. Given the scope of the project, these internal differences were not investigated further.

• The top five countries of birth were China 37.6 per cent, Malaysia 9.0 per cent, Indonesia 7.5 per cent, Hong Kong 6.1 per cent and India 4.8 per cent. Overall the participating students represented some 59 different countries.

• There was a relatively even balance between undergraduate (47 per cent) and postgraduate (53 per cent) participants.

• The sample was dominated by students enrolled in Commerce/Business Studies (57 per cent). The next largest disciplinary groupings were in Society & Culture (including media, linguistics and languages) (10 per cent), Health (9.3 per cent) and Education (including TESOL) (5 per cent), with the remaining 19 per cent spread across 6 other discipline areas.

• 67.7 per cent had been required to produce an IELTS score for visa entry to Australia, however only 50.6 per cent used IELTS for course entry and just 44 per cent of the latter students (n=178) provided us with details of their IELTS scores.

• The bulk of students (62 per cent) were in their second or third year of study in Australia; 22.3 per cent were in their fourth or fifth year; 7.8 per cent were in their first year; and 7.9 per cent had been studying here for 6 years or more.

At the completion of the questionnaire, students were asked if they were prepared to be interviewed, and in some cases video-taped, in order to provide more detailed information that could enhance the resources developed as part of this project. In total, twelve students were interviewed by members of the research team.

Whilst the number of students interviewed was less than originally proposed, this need was obviated to some degree by the overwhelming responses received for open-ended questions on the survey instrument. This proved to be a more effective way to gather information on what students do and don’t do to improve their English and provided a considerable body of rich data. Students were advised that their written English skills were not important in these responses, so verbatim quotes in this report have not been corrected. Students’ quotes used on the CD ROM student resource, however, have been corrected.

Our results must, however, be viewed with caution. As with any self-selecting sample, it is often the most able who will participate in such studies or, in this case, complete the whole questionnaire, so we may not have captured the responses of many students who are facing considerable difficulty at university. Nonetheless, we feel that the richness of the qualitative data provides a relatively accurate picture of the international student experience.

Teaching staff: Interviews were also conducted with staff to ascertain their perceptions regarding: the language needs of their students; the difficulties they see NESB students facing; their expectations of students in terms of oral communication (speaking and listening), reading and writing skills; the strategies the students could develop that could enhance their learning; and their thoughts on cross cultural
interaction and collaboration (see Appendix 11 for a copy of the staff interview schedule). Although a number of teaching staff were approached, only two actually volunteered to be interviewed about their experiences in teaching international students. This may have been the result of academic staff being short of time, but there was also a sense, in response to our requests, that talking about international students was a sensitive topic.

Procedure

This project consisted of three distinct phases as described below.

*Phase one* involved a review of the literature on international students, second language development, strategy use and other affective factors (e.g., beliefs, motivation, willingness to communicate) that may promote or inhibit language growth. This information was then used to inform the development of the data collection instruments, particularly the questionnaire, but also the interview schedules. This phase also included the development of a dedicated website which was used for both data collection, as a resource for students, and as a mechanism to provide ongoing feedback from on the project.

A key part of this first phase was seeking and gaining ethics approval from the five participating universities. This process proved to unexpectedly time consuming—with final approval not being granted until September of the first year—five months longer than initially anticipated.

The questionnaire and interview schedules were developed based on the relevant literature, but were also informed by the research team and by the advisory group. Questions were discussed and modified on this basis. A trial of the questionnaire was conducted with a number of volunteer students and further modifications were made in response to their feedback. Eventually the final form of the questionnaire was formulated and uploaded to a dedicated website in October 2008. As ethics approval was granted at the various universities, promotions were commenced on those campuses to recruit students to participate. Prizes were awarded as an incentive for students to undertake the survey. Respondents could enter a draw for an iPod at the end of 2008 and again at the close of data collection 2009 (on each occasion, one iPod per university was offered). All interviewees were given double movie vouchers in recognition of the time they gave to the task.

*Phase two* involved data collection and data analysis. Data were collected using the online questionnaire between late September 2008 and the end of April 2009. Interviews were also conducted during this time and were informed by ongoing results from the survey so that emerging issues could be identified and investigated further. Although a discussion board was placed on the website to encourage comment and as a further means of qualitative data collection, this did not prove to be a useful strategy, with very few contributions being received. However, as described above, the open-ended questions in the survey provided a useful source of additional data with many participants taking the time to provide in depth and detailed responses about their experiences. It seems, therefore, that the anonymity provided by the online survey resulted in more successful qualitative data collection.

In addition to completing the online questionnaire, the students were asked if they would give permission for their Grade Point Average (or equivalent) to be provided to us. GPA scores were used to ascertain the general level of achievement of individual students so that we could discriminate between levels of academic achievement. In line with the ethics requirements of the study, all quantitative data (GPAs and survey responses) were de-identified to ensure the students’ privacy. At no time did the research team have access to individual student’s academic results. Many (635 or 79.6
per cent) of the 798 students gave permission for their GPA scores or equivalent to be used for the project, which may again indicate that higher achieving students had self-selected to complete the survey, given they are likely to be more open to making their academic results available. When the de-identified GPA data were sent by participating universities, we were only provided with GPA results for 466 students (229 UG, 223 PG Coursework, 14 PG Research). Understandably, GPAs were not always available for PG research students or for students in their first semester of study.

Statistical analysis of the quantitative data was undertaken using ‘Statistical Package for Social Sciences (SPSS), Version 17’. Firstly to gauge overall patterns of responses, means and standard deviations were calculated for students’ responses to each question. Comparisons were then made between the various groups based on demographic variables (i.e., age, gender, level of study). The control variable ‘age’ was coded as a dichotomy: 18-23 yrs old and 24 yrs and older. ‘Level of study’ was also coded as a dichotomy: Undergraduate and Postgraduate (the latter including PG Coursework, PG Research and Honours). This was done for statistical purposes, however, it did have the effect of masking particular differences between PG Research and PG Coursework students. Further chi-square analyses enabled us to differentiate between postgraduate research and Masters’ coursework students. These results are provided as footnotes below the data tables presented in the following chapter.

Finally, correlational analysis was undertaken to determine if there was a relationship between student responses to items on the questionnaire and their GPAs. The five universities provided their GPA in slightly different forms and so in order to calculate the correlations between the students’ scores and their responses to items in the survey, it was first necessary to standardise the results. In this way the data for comparison was normally distributed.

Theme analysis of the qualitative data was then undertaken to help triangulate the findings and to strengthen the development of deliverables. The narratives of students’ own experiences, as captured in open-ended survey questions and interviews, provided rich evidence of their learning processes (Dreachslin 1999; Garavan and Murphy 2001; Knight 2002) and greatly enhanced our findings.

Phase Three, of which this report forms part, involved dissemination of the findings through the development of learning and teaching resources. There are two main forms: this report and a CD ROM that advises students on ways that their English language can continue to be developed and their academic success enhanced. The CD ROM also provides advice on what staff expect of international students. An additional resource which complements this deliverable is the staff resource which provides a check list of major findings regarding international students’ language and academic learning and advice on how this learning can be enhanced or improved.

Limitations

As with any research of this nature, a number of limitations must be acknowledged. As already indicated, because of the extent of the questionnaire and motivation inherent in those wishing to complete it, the sample is self-selecting. Generally it is only those who are already interested and willing to develop their English proficiency who choose to participate in such situations. This may have diminished the representative nature of

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1 It should be noted that, level of study and age are closely related. For instance: - 86.0 per cent of 18-23 year olds were Undergraduate, 14.0 per cent Postgraduate (none PG Research), and 80.0 per cent of students aged 24 years or older were Postgraduate (13.4 per cent PG Research), while 20.0 per cent are Undergraduate.
the sample. However, as we have also stated, the size of the sample and the richness of the qualitative research helps to obviate this potential shortcoming.

Despite the large and the general consistency in the pattern of survey responses, the final GPA sample size is smaller than we had hoped. So although it does serve to give an indication, a greater number of GPA results may have resulted in different findings, particularly with regard to the correlational results. In addition, the use of GPA as a measure of achievement has been questioned by a number of researchers and similar to our own findings, some have found few, if any, correlations between student factors (such as academic strategies) and GPAs (See for example, Najar & Davis (2001) and further discussion in the literature review). Indeed, Sadler (2009) questions the very integrity of grades such as GPAs by raising concern about a) the measurement of “course-related student activities and behaviours that do not fall within the formal meaning of achievement but are nevertheless routinely incorporated into grades”, and b) the measurement of “student’s relative achievement with the [unit] cohort” (Sadler 2009).

Whilst the open-ended questions provide very rich data and the interviews were illuminative, it is hard to ascertain how representative such qualitative responses are. Therefore, although there was considerable concurrence between the various data sources, as always a larger sample size would have been useful.

Whilst acknowledging these limitations, it must also be stated that in promoting this research through presentations at local and national conferences, the interest generated and the overwhelming expressions of support for our findings does seem to indicate that we have accurately captured the picture of international students and the challenges they face in “growing their English”.

Addressing the ongoing English language growth of international students
4. Research Findings

In this study we gathered a range of information from international students whose first language is not English. The student survey collected demographic data (which have already been outlined in the Methodology and Demographics section of this report) as well as quantitative and qualitative data on students’ self rating of their English competency, their English usage, learning strategies including those specifically concerned with language learning, and their motivation and beliefs. This information was then correlated with students’ Grade Point Averages, or normalised equivalents, to investigate if any relationship existed between these scores and academic outcomes.

The qualitative findings of this report show that many international students struggle to adapt to the academic literacy demands of their host universities. These findings are not new. Similar findings have been reported in many studies of non-NS students’ experience in Australia and in other English-speaking countries for more than twenty years now (e.g., Ballard and Clanchy 1997; Choi 1997; Gravatt, Richards et al. 1997; Beasley and Pearson 1999; Coley 1999; Ninnes, Aitchison et al. 1999; Mulligan and Kirkpatrick 2000; Borland and Pearce 2002; Hawthorne, Minas et al. 2004; Sawir 2005; Alazzi and Chiodo 2006; Cross and Hitchcock 2007).

One of the many contributing factors to this situation is that, although new international students have technically achieved a level of English acceptable for entry into Australian universities, the levels set by universities are generally at the threshold level only, so that most students need to develop their academic English further after enrolment (Coley 1999; Hawthorne et al 2004; Picard 2007; Bretag 2007; Hirsh 2007). Despite the time and effort that has been invested in language and learning support for international students in Australian universities (see Arkoudis & Starfield 2007 for a recent review of provision), it seems that, for a number of reasons, many students avoid or are unable to use such services (von Randow 2005; Wingate 2006; Ransom & Greig 2007; Arkoudis & Starfield 2007; Hirsh 2007) and need to develop their own strategies to achieve the English knowledge and skills required of them. In this project we have examined the use of such strategies, general English language usage as well as the affective aspects related to language development (i.e., motivation and beliefs), and whether these factors have any measurable relationship with academic success. It is in this respect that our study of international students differs from earlier investigations.

Although some 635 students (79.6% of the total cohort) gave their permission for use of the CPA scores or equivalent, we only received 466 GPA results from the universities’ databases. Understandably, GPAs were not always available for most PG research students or for students still in their first semester of study. As a result correlations with GPAs were only possible for those students who gave permission and who had been at university for more than one semester.

**English language self-assessment and self-efficacy**

While Section 1 of our survey instrument, captured general demographic data, Section 2 survey sought students’ self-assessment of their proficiency in the four major skills (reading, writing, speaking and listening) upon arriving in Australia and at the time of doing the survey.

**Development of English skills since arrival in Australia**

Most students reported some improvement in the four skills from the time they arrived until completing the survey when comparing themselves with native speakers, as shown in the mean responses (Table 1). They also rated themselves above average
when comparing themselves with their non-NS peers. These results, of course, must be viewed with caution given the self–selecting nature of voluntary surveys, but it does appear that respondents to this particular survey may have had a higher than average facility with English or high self-efficacy.

Table 1: Self-rating of development of English competence in 4 skill areas

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Compared with NS students in my course, my English skills when I started my course in Australia were:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Reading</td>
<td>2.94</td>
<td>1.009</td>
<td><strong>.206</strong></td>
</tr>
<tr>
<td>b) Writing</td>
<td>2.57</td>
<td>1.014</td>
<td><strong>.149</strong></td>
</tr>
<tr>
<td>c) Speaking</td>
<td>2.49</td>
<td>1.044</td>
<td></td>
</tr>
<tr>
<td>d) Listening</td>
<td>2.76</td>
<td>1.061</td>
<td></td>
</tr>
<tr>
<td>7. Compared with NS students in my course, my English skills now are:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Reading</td>
<td>3.31</td>
<td>.959</td>
<td><strong>.145</strong></td>
</tr>
<tr>
<td>b) Writing</td>
<td>3.00</td>
<td>.978</td>
<td><strong>.118</strong></td>
</tr>
<tr>
<td>c) Speaking</td>
<td>2.97</td>
<td>1.054</td>
<td></td>
</tr>
<tr>
<td>d) Listening</td>
<td>3.23</td>
<td>1.026</td>
<td></td>
</tr>
<tr>
<td>8. Compared with other non-NS students in my course, my English skills now are:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Reading</td>
<td>3.86</td>
<td>.836</td>
<td><strong>.180</strong></td>
</tr>
<tr>
<td>b) Writing</td>
<td>3.66</td>
<td>.893</td>
<td><strong>.147</strong></td>
</tr>
<tr>
<td>c) Speaking</td>
<td>3.76</td>
<td>.948</td>
<td></td>
</tr>
<tr>
<td>d) Listening</td>
<td>3.85</td>
<td>.906</td>
<td><strong>.105</strong></td>
</tr>
</tbody>
</table>

NOTE: Item numbers used in tables are as they appeared in the ELG survey.

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

1 Item 6a: Males rated their reading skills significantly higher than females both at the time of starting their course in Australia (M 29.6% ‘above average’ or ‘excellent’ cf. F 22.3%, p=0.037) (item 6a); and ‘now’ (i.e. at the time of completing the survey) (M 48.1% ‘above average’ or ‘excellent’ cf. F 36%, p=0.011) (item 7a). These gender differences were consistent across both levels of study (PG/UG) but were particularly strong at the PG research level. These results suggest a generally higher level of confidence among males, however, further research is required to examine to what extent this finding can be generalised.

2 Item 7b: Males were significantly more confident about their current proficiency in writing (M 34.5% ‘above average’ or ‘excellent’ cf. F 25.8%, p=0.022). Again, these differences held for UG (M 34% cf. F 23.8%) and PG Coursework students (M 34.3% cf. 25.4%), however PG research females were marginally more confident than males in this respect (M 37.9% cf. F 41.2%). As above, differences across genders may be better established with further research.

Analysis of Response Means

It can be seen from the high mean scores (all >3) and quite low standard deviations (SDs) that, as a group, the participants (n=798) generally rate their English competence now compared with other non-NS students as tending to above average. This again may reflect the self-selecting nature of the cohort. Possession of a high standard of English was also implied in the qualitative data whereby some respondents commented, often disparagingly, on the English language skills of their peers. These comments ranged from negative perceptions of many other international students and to dissatisfaction with the current English entry levels:
I strongly believe the English level for university entry must be higher than current condition because all these students... (even PGs) are failing and repeating the same subjects over and over again. This is the reality.

Some of my Asian fellow students should not be here, they do not know English at all.

...there are lots of students struggling with the demands in spite of supposedly having taken a test with sufficiently good result; leads to lowering of the standard of education.

Comments made by one of the students interviewed for the project are worth quoting in full:

Q: What do you think universities can do to give international students greater opportunities to use/develop their English skills?

A: I think for starters—I know this may be an unpopular statement—but I think they should be stricter with admissions tests. As I said, I was mentoring and there’s a lot of students [struggling]. It doesn’t help them and neither does it help the university, if they are not at a level where they are comfortable with speaking or communicating in it. And you know when people come here with the bare necessity of language skill, I can’t see any benefit to anyone except they are paying tuition fees. If they are struggling to even comprehend basic statements in lectures and having to translate every single word in the textbook, it’s so time-consuming, it must be so frustrating for them….Usually they took an English test apparently, the usual ones are the TOEFL or IELTS. But I sometimes doubted that, because I did well in the TOEFL but it wasn’t something I thought you could get through with the level of English that some students have. I think it is actually irresponsible of the university to admit them because they are having a horrible time, they are buying their essays from other people or copying down simply because they can’t, don’t have the time to and I guess psychologically can’t keep up with things. So I have met quite a few people who are desperate to keep up with things…

If we consider how students rated their English skills development (i.e., how they rate their English skills against a NS when they began their course and how they rate themselves now), it is interesting to note that development in the ‘productive skills’ was rated slightly lower (writing from M 2.57, SD 1.014 to M 3.00, SD 0.978; speaking from M 2.49, SD 1.044 to M 2.97, SD 1.054) than the development of ‘receptive’ skills (reading from M 2.94, SD 1.009 to M 3.31, SD 0.959; listening from M 2.76, SD 1.061 to M 3.23, SD 1.026). In fact, overall, there was a general trend in which productive skills (writing and speaking) were rated more conservatively than receptive skills (reading and listening). This is supported further by the qualitative data wherein many students expressed deep concerns about their speaking abilities, for example:

I am a little bit scared because I’m afraid of they can’t understand me sometimes.

and particularly when presenting in front of their class:

.. when I need to do a presentation in the class, I tend to forget the words and ideas about my topic and I often get nervous.

Some students even felt that their language skills had regressed since arriving in Australia, that their vocabulary has shrunk and that their language ability has, in some ways, become worse:

Ever since i arrived in australia, my english has been suffering a lot as i’ve got to mingle with too many international students who don’t speak english properly
… I can’t express myself as I used to in the past. Well, I think I’ve been responding as perceived and expected…. is just a huge nightmare for my English ability. Stop underestimating international students’ English…

- It is really hard to improve my English skills at uni due that I don’t have many Australian classmates.
- At some level, one’s English level (specially listening and speaking) improves only through interacting with native speakers. In group meetings, lectures, tutorials, etc. we normally interact with non-natives who in many cases, themselves, struggle to learn English.
- Sometimes I just don’t get chances to use English in my day-today activity, because mostly all international students just mingle and hang-out with students from their own country.

Comments by one student interviewee provided an interesting perspective on the influence of disciplinary genres in the development of language skills. She explained that, as an undergraduate student of English studies in her home country, she had mastered around 10,000 words and had been able to produce complex text in accordance with her course demands. A large proportion of this corpus, she believed, had become irrelevant for her current postgraduate studies in Management and Commerce:

- Unfortunately I think that through the course my listening skills and speaking communication skills have improved but my writing skills are dropping down. I mean the word vocabulary, I used to be a 10,000-word commander but now I don’t think so, it is maybe down to 5,000 words. I don’t know why….. because maybe I am not reading a lot of materials… and maybe I try to use a lot of simple words in my assignments and not use a lot of hard words. [Are you doing well in your assignments?] I try to… my tutor asked me to write in simple English and I did that, but it is different to when I did my thesis in China, because they asked me to write using a complex structure and complex words to express myself, but now things have changed a little bit.

Correlation with GPA

Although significant, the correlations between the students’ self-rating and their GPAs are weak. Between 0.794 and 0.895 variance can be accounted for by other factors. It is interesting to note that the strongest relationship is between the students’ self-rating in the skill area of reading (at the commencement of their course \( r = 0.206 \), now \( r = 0.145 \) and in comparison to native speakers \( r = 0.18 \)). This is consistent with previous research which has found that only the macroskill of reading has a moderately positive relationship with academic results (Cotton and Conrow 1998; Dooey and Oliver 2002; Phakiti 2008). This is not surprising given the importance of understanding reading content in order to respond adequately to most writing tasks. There were also significant but low-level relationships with the students’ self-rating of their writing (at the commencement of their course \( r = 0.149 \), now \( r = 0.118 \) and in comparison to native speakers \( r = 0.147 \)) and this might be explained by the value of practice. There were no significant correlations between the students’ GPA and speaking, and only when considering their ability in relation to native speakers did listening correlate significantly \( (r = 0.105) \). Therefore, although weak, our correlation results do suggest that students’ self-assessment of their English skills may be related in some small way to their academic achievement.
English competence in relation to course demands

We also asked students to compare themselves with native speakers and with other international students from non-NS backgrounds and to make an assessment of their skills in view of the demands of their course of study.

Analysis of Response Means

Overall, the mean scores for this section (Table 2) show that the participants had a considerable level of agreement with positive statements about their understanding, confidence and abilities with English. A high proportion believed that they had adequate English to at least pass their course of study (item 15, M 4.11 SD 0.895) and even to do well in it (item 16, M 3.55 SD 1.086).

Table 2: Self-rating of English competence in relation to course demands

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Understand everything when someone speaks to me in English</td>
<td>3.74</td>
<td>1.007</td>
<td></td>
</tr>
<tr>
<td>10. Trouble understanding lecturers/tutors with Australian accents1</td>
<td>2.39</td>
<td>1.09</td>
<td>-0.099*</td>
</tr>
<tr>
<td>11. Trouble understanding lecturers/tutors with foreign accents2</td>
<td>2.74</td>
<td>1.139</td>
<td></td>
</tr>
<tr>
<td>12. Easily understand books and articles</td>
<td>3.80</td>
<td>.924</td>
<td>0.112*</td>
</tr>
<tr>
<td>13. Confident to make self understood when speaking English</td>
<td>3.70</td>
<td>.954</td>
<td></td>
</tr>
<tr>
<td>14. Confident to express self clearly when writing English</td>
<td>3.67</td>
<td>.953</td>
<td>0.115*</td>
</tr>
<tr>
<td>15. Level of English good enough to at least pass</td>
<td>4.11</td>
<td>.895</td>
<td>0.147**</td>
</tr>
<tr>
<td>16. Level of English good enough to perform well</td>
<td>3.55</td>
<td>1.086</td>
<td>0.229**</td>
</tr>
</tbody>
</table>

* Correlation significant at the 0.05 level (2ailed)
** Correlation significant at the 0.01 level (2ailed)

1 For items 10 and 11 low scores actually indicate positive attributions (i.e. they don’t have much difficulty understanding their lecturers/tutors’ accents).
2 Item 14: Male students claimed greater confidence in self-expression when writing in English (M 63.5% ‘agree’ or ‘strongly agree’ cf. F 58.5%, p=0.013). These differences held across level of study. PG Research students of either gender showed considerably more confidence than other students in their ability to express themselves in written English (M 79.3% ‘agree’ or ‘strongly agree’ cf. F 70.6%).

Students reported that they have relatively little trouble understanding English in general (item 9: M 3.74, SD 1.007) but found it slightly more difficult if different accents were involved (item 10: M 2.39, SD 1.09; and item 11: M 2.74, SD 1.134). The high SDs however indicate a broad range of opinion on this issue, as the qualitative comments confirm (see below for examples).

The qualitative responses of many participants did indicate that understanding accents was troublesome for students from different backgrounds. For example, a European student may report Chinese speaking lecturers and tutors as hard to understand; Chinese speaking students may report Indian, Sri Lankan or European lecturers or tutors as difficult to understand; and both these groups may report Australian accents as hard to understand. For example:

- I found it harder to understand lecturers with non-English accent.
- As a nursing student, I have to communicate with different people including doctors, nurses, patients and their families. I find that listening and understanding different levels of Australian accent is challenging.
However, for some this was just a question of time and some students were pleased to report that they had become accustomed to the different accents of the multi-cultural Australian university workforce:

- *It took time for me, at the beginning, to get used to various accents here in Australian. Yet, it is getting better.*

The self-assessment component of the survey also gave rise to concerns about “slang”, including idiomatic and metaphoric expressions:

- *Australian slangs and foreign slangs of other international student sometimes confuses me.*

Interestingly, some students are not finding the language or their discipline areas or lectures to be helpful in expanding their social communicative skills, so the isolation and reliance on their own language group continues. Moreover, even this formal academic language is difficult and often minimises—or blocks entirely—communication between students and their lecturers and tutors:

- *I have trouble understanding my lecture/tutors because they speak too fast. Or in some difficult unit, like legal framework.*

- *I am totally confused in my class. Do not know what the tutor said…not really have any help, still poor.*

- *Even if my lecturers or tutors say "ask if you have any question" or "let me know if you don't understand", it is hard to ask question when I can't explain what I don't understand or once I get confused in the class and just can't understand most of the things they say.*

- *Don't think that group discussion helps us improve english it doesn't. cultural barrier, language difference itself. face the truth no one helps us learn english but ourselves....*

- *…because of lack of speaking skills student hesitate to ask doubts and always find it difficult to take part in discussion going on in the class and keeping their own point of view about the subject….I dont even know if they provide any help of this sort. I never heard of it.*

- *… even though I can speak English, I fell horrible to speak about something business thing its professional terms. I definetly have an idea about the discussion topic, but I can't say it like other students… it make me feel down.*

**Correlation with GPA**

Again in this section the relationship between the students’ self-rating of their English competence showed significant, but weak correlations with their GPAs. The strongest significant correlation was between the global assessment, having ‘level of English good enough to perform well’, and the students’ GPA ($r = 0.299$) and in this sense the students do seem to have attained some degree of reliability in their self assessment. Here, and elsewhere these low level correlation results highlight the contribution of other factors to achievement. This supports the qualitative findings of Phakiti (2008) and other researchers (e.g., Fox 2004) who suggest the importance of non-linguistic factors in influencing academic success. They also support claims made by Dornyei (2009) and others, that success in a second language is such a dynamic process that it may be best accounted for by complexity theory.

Other self assessments that had significant, although again weak, correlations (in descending order of strength) were ‘level of English good enough to pass’ ($r = 0.147$); ‘confidence to express myself with writing English’ ($r = 0.115$); and, ‘understand books and articles’ ($r = 0.112$). A very weak, but none-the-less significant, negative correlation
was found between the students’ self rating of the trouble they have understanding lecturer’s/tutor’s Australian accents and their GPAs ($r = -0.99$). That is, the more trouble they felt they had, the lower their GPA and visa versa suggesting that some lecturer’s accents may inhibit some students’ learning. This lack of familiarity and difficulty in dealing with the Australian accent is something that emerged quite strongly in the qualitative data:

- *I have come across so many overseas students having big trouble with english in the classes, for example strong accent from the teaching staffs or writing the essays.*

**Where and when students use English**

This section explores the context in which the participants use English and their comfort and willingness to do so.

**Use of English and confidence in doing so**

Students were asked how and when they used their second (or third, etc) language—that is, English—in their day-to-day communication at university, at work, or socially. Much anecdotal evidence suggests that for any skill “practice makes perfect”, but consistent comments are made by university teaching staff that international students from non-English speaking backgrounds tend to use their home language for most of their communication outside the university teaching environment.

Questions on English language use (Table 3 below) captured information on the degree of comfort participants found in using English daily, when starting conversations, writing, or chatting with friends, or other students from a range of backgrounds. We also enquired about their ability to speak comfortably about their field of study, at informal gatherings, whether they were comfortable to speak in spite of making mistakes, and whether they spoke more English in their jobs than at university. In short, we enquired about students’ active use of English.

**Analysis of Response Means**

The responses show that, overall, the majority of participants actively used English in a variety of contexts for various purposes. Means of over 4 indicate situations where students use English “often” to “always”.

For Item 1, there is a high mean (and low SD) for using English generally in ‘daily life’ (M 4.07, SD 0.886). This is supported by a high level of use in more specific situations such as ‘starting conversations in English even with strangers’ (item 2) (M 4.00, SD 0.978); ‘feeling comfortable speaking English with friends’ and ‘students from other non-English language backgrounds’ (M 4.34, SD 0.862 and M 4.27, SD 0.864 respectively); and having the confidence to keep trying, in spite of making mistakes (M 4.10, SD 0.955). The majority of students also indicated that they felt ‘comfortable to write notes, messages and emails in English’ (M 4.34, SD 0.862). These findings indicate that the respondents possess a high level of automatised access to English vocabulary and syntax, and a willingness to continue to develop their fluency through everyday interpersonal interactions (see Bialystok 1991 for a discussion of the importance of functional practice in naturalistic learning environments to develop fluency).
Table 3: Students’ active use of and confidence in English

Scale used: Never [1], Rarely [2], Sometimes [3], Often [4], Always [5]—‘NA’ removed

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use English in daily life</td>
<td>4.07</td>
<td>.886</td>
<td>.100*</td>
</tr>
<tr>
<td>2. Comfortable starting conversations in English even with strangers</td>
<td>4.00</td>
<td>.978</td>
<td></td>
</tr>
<tr>
<td>3. When with English speakers I will:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Introduce self</td>
<td>3.76</td>
<td>.978</td>
<td></td>
</tr>
<tr>
<td>b. Try to find out about them</td>
<td>3.59</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>c. Avoid them</td>
<td>2.20</td>
<td>.917</td>
<td></td>
</tr>
<tr>
<td>d. Only speak when someone speaks to me</td>
<td>3.21</td>
<td>1.097</td>
<td></td>
</tr>
<tr>
<td>4. I feel comfortable to write notes, messages and emails in English</td>
<td>4.39</td>
<td>.781</td>
<td></td>
</tr>
<tr>
<td>5. I feel comfortable speaking English with friends:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. From the same language background as me</td>
<td>3.76</td>
<td>1.301</td>
<td></td>
</tr>
<tr>
<td>b. From other non-English language backgrounds</td>
<td>4.34</td>
<td>.862</td>
<td></td>
</tr>
<tr>
<td>c. Who are NS of English</td>
<td>4.05</td>
<td>1.003</td>
<td></td>
</tr>
<tr>
<td>6. I feel comfortable speaking English with other students:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. From the same language background as me</td>
<td>3.08</td>
<td>1.240</td>
<td></td>
</tr>
<tr>
<td>b. From other non-English language backgrounds</td>
<td>4.27</td>
<td>.864</td>
<td></td>
</tr>
<tr>
<td>c. Who are NS of English</td>
<td>3.94</td>
<td>1.049</td>
<td></td>
</tr>
<tr>
<td>7. I feel comfortable speaking in English about my field of study:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. In front of a whole class</td>
<td>3.33</td>
<td>1.221</td>
<td></td>
</tr>
<tr>
<td>b. In small tutorial groups</td>
<td>3.77</td>
<td>1.031</td>
<td></td>
</tr>
<tr>
<td>c. With my lecturers/tutors/supervisors</td>
<td>3.95</td>
<td>1.008</td>
<td></td>
</tr>
<tr>
<td>8. I feel comfortable speaking English in an informal gathering</td>
<td>3.96</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td>9. Even when I make mistakes, I am confident enough to keep trying</td>
<td>4.10</td>
<td>.955</td>
<td></td>
</tr>
<tr>
<td>10. I speak more English in my part-time job than I do at university</td>
<td>3.35</td>
<td>1.350</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

1 Item 3c showed a significant difference between postgraduate students and undergraduate students in our chi–square analysis (p=0.022). Postgraduate students (especially PG Research students – 79.4% ‘never/rarely’) were significantly less likely to avoid English speakers than were UG students (60.2% ‘never/rarely’).
2-4 Item 7: Level of study had a significant influence on results for item 7a (p=0.000), item 7b (p=0.000), and item 7c (p=0.042). Predictably, PG students (especially PG research students), were more comfortable than UG students in all situations when speaking in English about their field of study but especially for item 7a: only a little over a third (37.1%) of UGs were always/often comfortable speaking in front of a whole class (PG coursework 48.5% / PG Research 63.5%).
Age also had a significant effect for item 7a (p=0.010) (older students more confident), as did gender—males were noticeably more confident than females in almost all situations when speaking about their field of study in English.

These high mean scores are also supported in our qualitative data, for example:

- *I feel very confident when I speak very well but I feel absolutely frustrated when it goes wrong. But I am trying to learn to cope with these issues.*
- *I do not always feel confident to speak English, but his [an Australian friend] helping make me more confident than before.*
• I feel very comfortable using English to communicate with people. I secretly hope that all my non-English speaking friends can pick up English and state to communicate with me in English.

• I feel comfortable to communicate in English in my leisure time such as with meditation instructors.

• I feel very comfortable to speak English with my boyfriend or friends who are from different country, but I feel uncomfortable to speak English with local people and lecturer, and especially in front of the whole class.

• I feel confident to use English while doing grocery shopping, participating fitness class and speaking the same background tutor (either Taiwan or Chinese).

• If I can use my first language, I use my first language. If I cannot, I won’t avoid using English to communicate with people. I would like to use English in my daily life, but usually I cannot find many chances.

The low mean for item 3c ‘When I am with English speakers I will avoid them’ (M 2.20, SD 0.917) provides supporting evidence of the students’ confidence, and also of the internal consistency of our survey instrument.

Despite the general confidence of the cohort, the lower mean (M 3.33, SD 1.221) for Item 7a indicates some hesitancy in speaking in front of the class. However, it is noteworthy that this hesitancy reduces somewhat when speaking in small groups (7b) (M 3.77, SD 1.031) and even more when in one-to-one conversations with staff (7c) (M 3.95, SD 1.008). Understandably, students in general appear to be more comfortable (or less anxious) in smaller groups and in one-on-one conversations with academic staff and we found in further analysis that this holds true across gender, level of studies and age.

Written comments and interviews with students indicate a strong desire by most students to at least attempt to communicate in all settings, even if that means making mistakes. The overwhelming advice to other students is to not fear failure and to avoid using their first language, even if that means deliberately avoiding contact with students from their own country. Despite this advice many students did report high levels of anxiety when speaking in mixed settings, which reflects the outcomes for Q7 above:

• Although I feel confident with my language ability, sometimes I’m anxious to speak in my class. My anxiety sometimes influences me so much that I prefer to stay silent during discussion, especially when others are much more fluent than me.

As lecturers in universities, we expect students to use English as much as they can, even with peers from the same first language background. Means Analysis for item 5a ‘I feel comfortable speaking English with friends from the same language background as me’ (M 3.76, SD 1.301) somewhat belies the comments provided for open-ended questions:

• It makes me feel awkward to communicate in English with friends and family from my home country.

• Speaking English to people who came from the same background as me makes both of us feel really uncomfortable.

• It’s weird to speak English with someone from the same background with me.

Our qualitative results also alerted us to a number of students who were struggling to communicate comfortably in English:
• I feel comfortable talking to native English people only when they approached me and talked to me. Otherwise I don’t dare to talk to them. In a tutorial class I don’t feel confident to comment on and to ask the presenter about the topic.

• I feel like surrounding by people from my country. Maybe it sounds like a bit of excuse, but the truth is I rarely talk with depth with local people.

Considerable evidence of the anxiety and social isolation that international students experience while studying in a foreign country—as well as the negative effects that such anxiety can have on L2 development—has been widely reported in the literature (e.g., Ganschow, Sparks et al. 1994; Volet and Ang 1998; Woodrow and Chapman 2002a; Woodrow and Chapman 2002b; Campbell 2004; Alazzi and Chiido 2006; Lee 2007; Trahar 2007; Sawir, Marginson et al. 2008; Sumer, Poyrazli et al. 2008; Brown 2008a; Brown 2008b) and was frequently reported in our data:

• It is so embarrassing not to understand what the other person is saying. And more over its very difficult to find a Social Group with locals in it.

• I always use the wrong grammar and tenses that will make me embarassing. I am a coward that i dont know how to communicate with the stranger and even all my housemates from America or Europe. I would like to learn english well but i dont know how to start with and from. Actually, the hardest thing for me is I dont know how to get friends. I am still alone in the university eating alone walking alone attend the class alone. It is really hard for me to get a new friend.

• Although I am an English teacher myself, I still feel inconfident, insecure and frustrated when I talk to native speakers of English. It might be because of my fear of making mistakes or looking foolish.

• We are shy because we have no chance to try!!! We are actually pretty interesting as long as we have opportunity to show you, western people!

• I really want to be getting the same level as native speakers. But the point is, I don’t think native speakers and non-natives speakers can truly mix together for a long time. We face a big problem of culture difference. I would like to overcome my accent problem, but seems that it is so hard to even understand local’s slang…

• At the beginning, I wanted to join various activities with native speakers, but then, I found they were friendly rather than supportive. I felt isolated sometimes, as they had their own social network, I am afraid of saying something wrong, if others are native speakers. I always feel shy and nervous when presenting in front of a group of people, particularly we don’t have friendship.

• It is like a dilemma. you want to communicate with the native in english. but your awkward stupid english prevent you from getting their points, fluent expression. At most times it was definitely quite frustrated for me.

It appears, therefore, that shyness and fear of losing face are major factors affecting students’ ability to interact with native speakers and to use such interaction to practise and develop their English. There is also no doubt that many continue to struggle with genuine language difficulties well into their courses:

• Group work is hard for people who don’t really speak proper English, especially if they get put in groups with native speakers because they get ignored I guess. They get given whatever easy tasks just so that they don’t have to engage with the group because they are having trouble keeping up. Which again is horrible for them because they feel undervalued, they can’t really contribute, they feel they’re not getting anything out of it and its not doing anything for them either. And its hard for the people trying to work with them because you can’t really
count on them pulling their load because they have to translate everything. The poor people they sit there, I don’t know, until 2 am and translate every single word using those pocket computers.

In the light of these findings, we cannot overlook the responsibility that native speaking students themselves should, as part of their general communicative competence, adjust their speech for their audience, and perhaps to use more formal or less idiomatic speech with international students. Perceptions that Australian students are “friendly rather than supportive” may simply result from the casual speech patterns of Australian youth. As one survey respondent suggests:

- … educate local students about what international students going through while they are here far from their homeland, friends and their family. they are really desperate to find friends.

**Correlation with GPA**

There is a very weak, but significant correlation ($r = 0.1$) between those who claim to use English in their daily life and their GPA (Item 1). Although low, the correlation result is supportive of what one would expect and it is certainly a result that corresponds with the qualitative findings. This positive correlation may suggest a more social approach to “English language growth” than the specific situations described in other items in Table 3. Somewhat surprisingly, none of the other items showed a significant correlation with students’ GPAs. Thus, although seemingly important (at least in a qualitative sense), the separate activities represented by each item do not contribute in significant ways to academic success. Rather, it may be that such activities contribute “in concert”—which would explain why the statement that reflects the cumulative actions (i.e., I use English in daily life) is the only item that achieves some significance.

**Use of English in a typical day**

In terms of a quantitative analysis of English language use we also asked students how many hours or minutes they would spend speaking English on a typical day (Table 4) and the number of people with whom they spoke English during a day (Table 5).

**Table 4: Time spent speaking English on a typical day**

<table>
<thead>
<tr>
<th>Item*</th>
<th>Mean</th>
<th>SD</th>
<th>% ‘Not at all/&lt;30 min’</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. On a typical day for how many hours/minutes do you speak English?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. During the week at university</td>
<td>4.25</td>
<td>1.53</td>
<td>38.5%</td>
</tr>
<tr>
<td>b. At part time job**</td>
<td>4.14</td>
<td>1.99</td>
<td>28.3%</td>
</tr>
<tr>
<td>c. At home in the evening</td>
<td>2.67</td>
<td>1.63</td>
<td>72.2%</td>
</tr>
<tr>
<td>d. On the weekend socially</td>
<td>3.65</td>
<td>1.72</td>
<td>51.4%</td>
</tr>
</tbody>
</table>

*There were no correlations between responses to Section 3, item 11, and GPAs.
**‘Not applicable’ removed—figures only relate to those with a PT job (n=494)

**Analysis of Response Means**

A large proportion of students indicated that they spoke in English for 1-2 hours per day or more during the week at university (M 4.25, SD 1.53) and in their part-time employment, (M 4.14, SD 1.99).

Of note, however, is the fact that English is used much less at home in the evening (M 2.67, SD 1.63), i.e., over 70% are not using English at all, or are using it for less than 30 minutes a day. Similarly, in social interaction on weekends English is not frequently
used (M 3.65, SD 1.72) i.e., over 50% do not use it at all or use it for less than 30 minutes a day.

These results confirm anecdotal evidence that international students are significantly more likely to use only their home language when away from university or work. This in turn may be influenced by the country of origin of students’ flat/house mates as some 46.7% of all respondents reported living with people from the same language background. This lack of practice in English was also evident in one student’s open-ended response:

- I am in Australia. I go to uni here. However, I can go without speaking English for more than a week although i am exposed to English during my classes…. one can live speaking English less than an hour a week until he or she graduates.

Table 5: Number of people students talk with in English on a typical day

<table>
<thead>
<tr>
<th>Item*</th>
<th>Mean</th>
<th>SD</th>
<th>% ‘None’</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. On a typical day how many people would you talk with in English?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. During the week at university</td>
<td>3.11</td>
<td>0.85</td>
<td>2.1%</td>
</tr>
<tr>
<td>b. At part time job**</td>
<td>3.03</td>
<td>1.19</td>
<td>19.0%</td>
</tr>
<tr>
<td>c. At home in the evening</td>
<td>1.80</td>
<td>0.72</td>
<td>35.6%</td>
</tr>
<tr>
<td>d. On the weekend socially</td>
<td>2.80</td>
<td>1.04</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

*There were no correlations between responses to Section 3, item 12, and GPAs.
** NA removed—figures only relate to those with PT job (n=494)

Analysis of Response Means

The absence of any means close to 4.0 in Table 5 and the generally low SDs for Item 12 appear to indicate that the common behaviour of students is to interact with only a small group of peers with whom they are familiar. The highest mean reflecting interaction in English is at university, with the majority of students speaking with 3-5 people or more (M 3.11, SD 0.85). Just 2.1% of students indicated that they spoke with no-one in English on a typical day at university. This is supported to some extent by the qualitative data which shows that, even when surrounded by English speaking students and staff at university, international students often do not have the opportunity to speak English:

- Sometimes I just don't get chances to use English in my day-today activity, because mostly all international students just mingle and hang-out with students from their own country.
- For me, I don't get to speak English much at uni because unless I am doing a group work so I have to discuss something with my group members or have to give a presentation, otherwise I do my work at uni and go home, there isn't much socializing with local students they seem to stick together like Chinese students do.
- I Cant Find Enough time to Involve myself into other ways to improve my english, though i am really so keen on improving my english, especially the listening skills...After a while Because of the over burden the student totally gives up learning English and accepts the little that he knows.
- When i was in English bridging course, I had a chance to chat with others in english. But Im being in Uni course, I have less chance than before even none.

Additionally, many courses do not give international students time and opportunities to produce English—either spoken or written. For example, numerous courses use multiple choice formats for assessment, so students do not need to produce sustained
writing or speaking, with many reporting that their English actually regresses during their studies (personal communication Storch 2009).

Some students also believe that the high proportion of international students in their classes hinders their ability to improve their English skills:

- *There are too many international students in the university, so I don’t use English very often in the university.*
- *My environment is surrounded by koreans, definitely my English can’t improve.*

There is also a relatively higher mean for the number of people spoken to while working (M 3.03, SD 1.19), although the SD indicates a wider range of experiences. In fact 19% of students who have jobs indicated that, on a typical day at work, they spoke with no-one in English. This result suggests that the working environment may not always provide an opportunity to enhance English language skills. Nevertheless, the qualitative data did provide evidence of some positive outcomes for students in having a part-time job that gives them an opportunity to practise their English:

- *I am somewhat forced to improve my oral communication in English as I work at a footy venue where I have to answer and guide people. I usually use English with friends and tutors/lecturers. I also use English in shops or to find my way to reach some destination.*
- *I like to use English when I am working, because I have to communicate with my workmates by using English, because most of them are native-English people, and those are the most important time for me to practice English.*
- *I have a customer service part-time job for an Italian boss at the moment so I have to speak English all the time to the boss and also to the customers… sometime, those customers make me lose my confident when speaking English to them.*
- *… after a few week of working [in a nursing home], i felt more confident with my language. and now i can sort of talk to my residents freely. so learning a language is really a procedure of practice.*

The particularly low mean for the number of people spoken to in English at home in the evenings (M 1.80, SD 1.04—with 35.6% saying they spoke with no-one in English) both supports the data in Table 4 and reflects the students’ living situations, i.e., sharing accommodation with others from the same language background. The marginally higher mean for speaking in English socially over weekends (M 2.80, SD 1.04) suggests that only some students are developing mixed social circles.

**Correlation with GPA**

Contrary to some popular beliefs about language competence and academic achievement and the considerable level of evidence in the literature pertaining to the need for practice (see for example DeKeyser, 2007), there were no significant correlations between the students’ self rating about the number of hours they speak in English each day and their GPAs. It may be that the students’ self-rating is less than reliable, or it may be that, as noted, each item alone contributes in small cumulative ways, but not significant individually.

**Language use in electronic media**

A further point of interest raised in our survey was the use of language with electronic modes: email, SMS, messaging/chat, or telephone (Table 6).

Telephoning was the most commonly used mode of communicating with family and friends back home (99.7%). This result was most likely influenced by the resources
available to families in the home country. The next more frequently used mode was email (97.5%), followed by messaging/chat (95.9%) and SMS (94.7%).

First language was by far the most commonly used language (used by 73-100% of students from different countries) when telephoning back home. The majority of students (62%) also used their first language when emailing, while 35% used English. English was predominantly used for emailing by students from India 90%; Africa 82%; Hong Kong 76%; Sri Lanka 75%; Malaysia 68%; and Thailand 55%. Many of these countries of course have English as an official language or as the language of instruction in many of their educational institutions. However, the use of emailing, in particular, will depend on the resources available to families and friends in the home country.

Table 6: Language use in electronic media

<table>
<thead>
<tr>
<th>Language mainly used to communicate with family &amp; friends in home country:</th>
<th>Email</th>
<th>SMS</th>
<th>Message/chat</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>My first language</td>
<td>62.1%</td>
<td>45.4%</td>
<td>60.2%</td>
<td>92.4%</td>
</tr>
<tr>
<td>English</td>
<td>34.8%</td>
<td>48.9%</td>
<td>34.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Another language</td>
<td>0.6%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>2.0%</td>
</tr>
<tr>
<td>I don't communicate in this way</td>
<td>2.5%</td>
<td>5.3%</td>
<td>4.1%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Although used by slightly fewer people as a mode of communication, the languages used for online messaging/chat were basically the same as for emailing.

In contrast to other modes, English was the main language used in SMS texting. Students from South Korea in particular were far more likely to use English when texting (60%) than they did in other modes.

There is a tendency of course for academics, and all educators, to claim that SMS messaging, email, and chat resources are detrimental to the development of standard English. To date, however, this has not been proven. Some research shows a slight negative impact on the formal writing skills of college students (Rosen, Chang et al. 2010), while others such as Plester & Wood (2009) find no evidence of a negative impact on pre-teenage literacy. Crystal (2008) notes that in order to create an SMS abbreviation the user requires a good understanding of the structure of English words: “If you can’t spell a word, then you don’t know whether it’s cool to misspell it” (cited in Crace, 2008). Crystal implies therefore that the construction of SMS abbreviations may require considerable linguistic knowledge, i.e., what segments to delete and what not to delete. However, this does not consider the tendency to simply copy abbreviations that one has received.

**Strategies to improve English**

This section addressed the use of particular language learning strategies and to investigate the correlation (positive or negative) between these strategies and academic achievement (measured by GPA).

**Analysis of Response Means**

Table 7 provides an interesting picture of what students do in terms of strategically approaching their English language development (Section 4 of our survey). A number
of strategies appear to be widely (‘sometimes’ to ‘often’) used, e.g., guessing meaning (item 9, M 3.59, SD 0.906); trying to understand from the context (item 12, M 3.97, SD 0.805); avoiding continual dictionary use (item 11, M 3.56, SD 1.001); focusing attention on meaning when someone talks to me in English (item 15, M 3.92, SD 0.898); forcing oneself to speak in spite of the fear of making mistakes (item 17, M 3.63, SD 1.020); and, to a lesser extent, asking interlocutors to slow down or repeat what they say (item 20, M 3.25, SD 1.020). Also of interest is the number of students who are watching English TV and movies (item 2, M 3.93, SD 0.914) and learning about Australian culture (item 22, M 3.62, SD 0.939).

Table 7: Strategies students use to improve their English

Scale: Never [1], Rarely [2], Sometimes [3], Often [4], Always [5]

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I hear or read a new English word or phrase I try to remember it by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Using it in a sentence</td>
<td>3.29</td>
<td>.905</td>
<td></td>
</tr>
<tr>
<td>b. Visualise an image/picture of how to spell it</td>
<td>3.09</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td>c. Connect it to an image</td>
<td>3.19</td>
<td>.993</td>
<td></td>
</tr>
<tr>
<td>d. Make a picture in my head of when it is used</td>
<td>3.09</td>
<td>1.048</td>
<td></td>
</tr>
<tr>
<td>e. Using the word or phrase in a rhyme or with related words</td>
<td>2.69</td>
<td>1.054</td>
<td>-.166**</td>
</tr>
<tr>
<td>f. writing it down on a list</td>
<td>2.87</td>
<td>1.158</td>
<td>-.106*</td>
</tr>
<tr>
<td>g. physically acting out its meaning</td>
<td>2.45</td>
<td>1.097</td>
<td></td>
</tr>
<tr>
<td>h. remembering when I first saw it</td>
<td>3.07</td>
<td>1.018</td>
<td>-.121**</td>
</tr>
<tr>
<td>i. saying or writing it several times</td>
<td>3.07</td>
<td>1.063</td>
<td></td>
</tr>
<tr>
<td>j. creating a wall chart of new words/phrases</td>
<td>2.07</td>
<td>1.019</td>
<td>-.159**</td>
</tr>
<tr>
<td>k. Other</td>
<td>1.98</td>
<td>1.305</td>
<td></td>
</tr>
<tr>
<td>2. I watch English TV and movies</td>
<td>3.93</td>
<td>.914</td>
<td></td>
</tr>
<tr>
<td>3. I listen to local English radio</td>
<td>3.12</td>
<td>1.165</td>
<td></td>
</tr>
<tr>
<td>4. I addition to my course requirements I read as much as I can in English such as:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. newspapers and magazines</td>
<td>3.39</td>
<td>1.025</td>
<td></td>
</tr>
<tr>
<td>b. novels or non-fictions books</td>
<td>2.94</td>
<td>1.136</td>
<td></td>
</tr>
<tr>
<td>c. other</td>
<td>2.48</td>
<td>1.464</td>
<td></td>
</tr>
<tr>
<td>5. When I read English:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. I first skim and then go back and read carefully</td>
<td>3.29</td>
<td>1.024</td>
<td></td>
</tr>
<tr>
<td>b. I read slowly and translate back into my own language</td>
<td>2.49</td>
<td>1.132</td>
<td>-.136**</td>
</tr>
<tr>
<td>6. I use the following English dictionaries when I read English:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. An English learners’ dictionary</td>
<td>2.36</td>
<td>1.271</td>
<td></td>
</tr>
<tr>
<td>b. A bilingual dictionary</td>
<td>2.64</td>
<td>1.316</td>
<td></td>
</tr>
<tr>
<td>c. A phrase book</td>
<td>1.87</td>
<td>.983</td>
<td></td>
</tr>
<tr>
<td>d. A general English dictionary</td>
<td>2.99</td>
<td>1.197</td>
<td></td>
</tr>
<tr>
<td>e. A thesaurus</td>
<td>2.51</td>
<td>1.209</td>
<td></td>
</tr>
<tr>
<td>7. I refer back to my old English grammar books to check my grammar, spelling etc</td>
<td>2.00</td>
<td>.971</td>
<td></td>
</tr>
<tr>
<td>8. I work out the meaning of an English work by dividing it into parts that I understand.</td>
<td>2.70</td>
<td>1.097</td>
<td>-.098*</td>
</tr>
<tr>
<td>9. When I do NOT understand something in English I guess what it means</td>
<td>3.59</td>
<td>.906</td>
<td></td>
</tr>
<tr>
<td>10. I look for words in my own language that are similar to new words I learn in English</td>
<td>2.88</td>
<td>1.098</td>
<td></td>
</tr>
<tr>
<td>11. I read English without looking up every new word in a dictionary</td>
<td>3.56</td>
<td>1.001</td>
<td></td>
</tr>
<tr>
<td>12. I try to understand new English words from their meaning</td>
<td>3.97</td>
<td>.805</td>
<td></td>
</tr>
</tbody>
</table>
### Addressing the ongoing English language growth of international students

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>If I can’t think of an English word, I use another that I think means the same thing</td>
<td>3.81</td>
<td>.874</td>
</tr>
<tr>
<td>14.</td>
<td>I focus my attention on a person’s pronunciation when they talk to me in English</td>
<td>3.47</td>
<td>.991</td>
</tr>
<tr>
<td>15.</td>
<td>I focus attention on trying to understand the meaning when someone talks to me in English</td>
<td>3.92</td>
<td>.898</td>
</tr>
<tr>
<td>16.</td>
<td>I try to find out new ways to improve my English</td>
<td>3.72</td>
<td>1.004</td>
</tr>
<tr>
<td>17.</td>
<td>I force myself to speak English even when I am afraid of making a mistake</td>
<td>3.63</td>
<td>1.020</td>
</tr>
<tr>
<td>18.</td>
<td>I write a journal about my English language problems/mistakes</td>
<td>1.94</td>
<td>1.017</td>
</tr>
<tr>
<td>19.</td>
<td>I talk to other people about any problems I have with using English</td>
<td>2.72</td>
<td>1.065</td>
</tr>
<tr>
<td>20.</td>
<td>I ask people to slow down or repeat when I do not understand</td>
<td>3.25</td>
<td>.957</td>
</tr>
<tr>
<td>21.</td>
<td>I ask native English speaker to correct my grammar or pronunciation</td>
<td>2.62</td>
<td>1.093</td>
</tr>
<tr>
<td>22.</td>
<td>I try to learn about Australian culture</td>
<td>3.62</td>
<td>.939</td>
</tr>
<tr>
<td>23.</td>
<td>I participate in campus activities where I can mix with English speakers</td>
<td>2.75</td>
<td>1.085</td>
</tr>
<tr>
<td>24.</td>
<td>I participate in social/sporting or community activities where I can mix with English speakers</td>
<td>2.67</td>
<td>1.182</td>
</tr>
</tbody>
</table>

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

---

1. Item 1h shows a significant difference for age (p=0.007). Younger students aged 18-23 years were more inclined to use this strategy (38.6% younger students strongly agreed/agreed cf. 29.1% older students).
2. Item 1i: PG students were significantly more likely than UG students to use this low-level repetition strategy to remember new words or phrases (p=0.036). The use of this strategy may also reflect the era of one’s language instruction.
3. Item 1j, another ‘low-level’ strategy, again this appears to be used more by postgraduate than undergraduate students (p=0.041), although overall its use was not widespread. However, it was rarely used as a strategy by students at all.
4. Item 14: Younger students were significantly more likely to use this strategy (52.3% younger students ‘strongly agreed/agreed’ cf. 44.5% older students) (p=0.023).

The findings also shed some light on the strategies that are not used as much (many of which may well be useful). For example, students are rarely using English learner’s dictionaries (item 6a) (M2.36, SD 1.271), which provide invaluable examples of the use of a word in its correct context. Dictionary use does appear to assist students when accompanied by discussion on the contextual occurrence of words:

- **Me-only Vietnamese and 7 of my Chinese housemate try to speak as much as we can about hobby, news, books sometime about politics as well. We try to describe using our vocabulary and also dictionary to transfer the word from Viet. or Chin. to Eng. and then we check again if the word is used the right way. My English improves a lot by this way.**

- **I usually would help my roommate who’s English is not as efficient as mine is. When she does not understand a word or phrase, she would ask me and at the same time, we will both try to figure out what the word means. If I do not know the word, we will check the online dictionary together. This helps me learn new words and meanings. Also, I improve my vocabulary by playing board games such as Cranium which provides me with meanings of uncommon words. It helps to think in English as well.**

Students are rarely referring back to their early grammar books (item 7) (M 2.00, SD 0.971): a revision strategy that may well improve writing. Also, very few students are writing ‘journals about their language problems/mistakes’ (item 18) (M 1.94, SD 1.017)
in spite of evidence of the value (for both native and non-native speakers) of writing daily to develop the rhetorical conventions or ‘disciplinary dialect’ (Taylor 1978) of their academic area.

Relatively low responses to item 19 about ‘talking to other people about any problems I have using English’ (M 2.72, SD 1.065) may indicate a fear of ‘losing face’ or perhaps students feel that talking to their peers about such problems is not much use—as one postgraduate student referred to it: ‘the blind leading the blind’. Discussion of content problems and content knowledge sharing are fundamental to learning in higher education in Australia and are supported by evidence of academic success. Trahar (2007) moreover cites numerous scholars who refer to the notion of collectivism and group study and its affinity with students from Asian cultures. It seems that similar discussion of English language learning problems does not commonly occur.

Given the centrality of strategies to the current project and the overwhelming response of students to open-ended questions in the survey, we have included a further section in this report to describe students’ choices of strategies and the research relating to their impact (see Section 5).

**Correlation with GPA**

Somewhat surprisingly, given the immense amount of research that has shown relationships between ‘good language learners’ and use of strategies, these results show that only two language-learning strategies had a significant, positive though very weak correlation with the students’ GPAs. These included: Item 13, ‘If I can’t think of an English word, I use another that I think means the same thing’ (r = 0.141) (suggesting that being able to develop the meta-linguistic skill of building a synonymous vocabulary is useful); and, item 23 ‘I participate in campus activities where I can mix with English speakers’ (r = 0.102). This second strategy is good news for institution orientation committees and other social support services such as student clubs and associations. The benefit of attending activities arranged for postgraduate students was strongly endorsed by one of our postgraduate interviewees, as was the sharing of notes and new cultural experiences with other students. Interestingly however, as indicated above, the means analysis shows that this strategy is not widely used (M 2.75, SD 1.085 or between ‘sometimes’ and ‘rarely’), providing a good case for the extension of such support. Comparison with a similar finding in section 3A (i.e. ‘I use English in my daily life’) is noteworthy and provides further support for the internal consistency of our instrument.

The negative correlations with GPAs in Table 7 provide interesting, although not particularly robust, evidence of strategies that may not work. For example, item 1e, ‘When I hear or read a new English word or phrase I try to remember it by using the word or phrase in a rhyme or with related words’ (r = -0.166); item 1j, ‘Creating a wall chart of new words/phrases’ (r = -0.159); item 1h ‘Remembering when I first saw it’ (r = -0.121); item 8, ‘I work out the meaning of an English word by dividing it into parts that I understand’ (r = -0.098); and item 5b, ‘When I read English I read slowly and translate back into my own language’ (r = -0.136). In the latter case (item 5b) students are assuming a one-to-one relationship between languages and are using a strategy that focuses on developing word level understanding and not a holistic global understanding of texts. In contrast to the more spontaneous communicative and social strategies, which show slight positive correlations with GPAs, these strategies that correlate negatively with GPAs would all be time-consuming and require focus on detail rather than on “big picture” understanding of content. One student we interviewed was keenly aware of the advantage of skim reading in order to cover the range of materials required for her course:

- *I guess wherever there was wide reading required beyond essay-writing, just researching or reading more than just the given text book where you had to do*
your own reading….Some subjects it was very explicitly stated at the start that it’s not enough if you just read the text book, but sometimes it becomes apparent during lectures and tutes that you need more than the text, so you just start picking up other stuff, even if you just skim read things, so that obviously helps if you learn to pick out important stuff without reading every single word or thinking about every single sentence. [So is that a skill that you developed since studying here?] Yes, because I never had to do that before in English….That’s something that came out of necessity at uni.

Thus it would seem that whereas communicative and social strategies are positively correlated with GPAs (when they do correlate significantly), language learning strategies that have a metalinguistic orientation show negative correlations. The use of these strategies may be the result of the advice that we give to early language learners and/or simply may be the strategies that learners develop based on their schooling or personal experience—however, it does not mean that they are useful for higher level study. In fact, the findings suggest that at this level, students need to engage in more advanced strategies that focus the learner on understanding, rather than simply on the form of English.

The purpose of this section was to find out the types of help provided by universities and within participants’ courses to improve their language and communication skills, and how often they use or experience it. The data is provided in Table 8 below.

Table 8: Use or experience of help to improve English

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I use the following language and communication skills support services provided by my University/ faculty:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Short courses (reading, writing, pronunciation etc)</td>
<td>2.16</td>
<td>1.392</td>
<td>1</td>
</tr>
<tr>
<td>b. Small group workshops</td>
<td>2.36</td>
<td>1.360</td>
<td></td>
</tr>
<tr>
<td>c. One-to-one tutorials on preparing assignments and/or oral presentations</td>
<td>2.18</td>
<td>1.364</td>
<td></td>
</tr>
<tr>
<td>d. Informal discussions with NS</td>
<td>2.74</td>
<td>1.398</td>
<td></td>
</tr>
<tr>
<td>e. Intensive language courses during semester breaks</td>
<td>1.81</td>
<td>1.299</td>
<td></td>
</tr>
<tr>
<td>f. ESL tutorials with my degree program</td>
<td>2.10</td>
<td>1.438</td>
<td></td>
</tr>
<tr>
<td>g. Lists of technical words and definitions</td>
<td>2.30</td>
<td>1.413</td>
<td></td>
</tr>
<tr>
<td>h. Editing/proof reading</td>
<td>2.31</td>
<td>1.439</td>
<td></td>
</tr>
<tr>
<td>2. My lecturers/tutors/ supervisors write helpful advice for improving my English</td>
<td>3.05</td>
<td>1.374</td>
<td>2</td>
</tr>
<tr>
<td>3. My lecturers/tutors/ supervisors give me useful feedback on improving my English after my oral presentations</td>
<td>3.09</td>
<td>1.538</td>
<td></td>
</tr>
<tr>
<td>4. My lecturers/tutors/supervisors help me find support so that I can improve my English</td>
<td>2.93</td>
<td>1.459</td>
<td></td>
</tr>
<tr>
<td>5. My written assessments include marks for good English</td>
<td>3.45</td>
<td>1.462</td>
<td>.100*</td>
</tr>
<tr>
<td>6. The content of my course helps me to improve my English</td>
<td>3.78</td>
<td>1.111</td>
<td>3</td>
</tr>
<tr>
<td>7. The assessment tasks in my course help to improve my English</td>
<td>3.88</td>
<td>1.068</td>
<td></td>
</tr>
<tr>
<td>8. I have many opportunities in my course to interact with English speaking students</td>
<td>3.54</td>
<td>1.203</td>
<td></td>
</tr>
<tr>
<td>9. The social opportunities at university help me to improve my English</td>
<td>3.40</td>
<td>1.237</td>
<td></td>
</tr>
<tr>
<td>10. My course provides opportunities for small group work and class discussions</td>
<td>3.76</td>
<td>1.057</td>
<td></td>
</tr>
<tr>
<td>11. Participating in tutorial classes/labs/seminars help me</td>
<td>3.72</td>
<td>1.135</td>
<td></td>
</tr>
</tbody>
</table>
to improve my English

13. Attending lecturers help me to improve my English 3.68 1.074

14. Overall my course is helping me to develop:
   a. My reading skills 4.13 0.972
   b. My speaking skills 3.54 1.143
   c. My writing skills 3.95 1.011
   d. My listening skills 4.10 0.994

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

1 Item 1b: PG students were more likely than UG students (p=0.017) to use small group workshops provided by L&CS services, although it is perhaps a reflection of the relatively high skill levels of our survey participants that a substantial proportion used these ‘never or rarely’ (58.9% UG/ 51.2% PG).

2 Item 3: There were significant differences on the basis of age (p=0.023) and level of study (p=0.004), with older / PG students more likely to receive helpful advice ‘often’ or ‘always’ compared with younger / UG students. This no doubt reflects the greater degree of individual attention that students studying for higher degrees receive and possibly a broader interpretation of what constitutes advice/feedback.

3 Item 7: PG students were significantly more likely to agree with this statement (p=0.020) which may reflect the deeper level of understanding required at this level.

4 Item 14d: Again more higher degree students than undergraduates acknowledged the development of their listening skills during the course of their studies (p=0.043).

Analysis of Response Means

It would seem that there is a relatively low level attendance at university or faculty provided support services by our respondents. This includes short skills-based courses (item 1a, M 2.16, SD 1.392); small group workshops (item 1b, M 2.36, SD 1.360); one-to-one sessions (item 1c, M 2.18, SD 1.364); and intensive inter-semester courses (item 1e, M 1.81, SD 1.299). This is clearly indicative that these valuable services are reaching few international students and will be of some concern to those responsible for university budgets. Students repeatedly reported lack of time as the major deterrent for improving their English through these services:

- Language/ communication skills programs sounds time-consuming. I would not think of attending because it is just too hard to find time to do revisions and other non-uni related activities. should be incorporated into mentoring program for freshmen year.

therefore, support centres may find that such sessions are not well patronised because of students’ workloads. Universities need to find a balance between the cost in time and personnel of providing particular sessions and the numbers of students who attend—perhaps by introducing embedded language and learning support in introductory units. Some Australian universities are already doing this as a more cost-effective and efficient way to achieve the same end. This is supported by the fact that numerous responses on the survey indicated that students lacked the time to focus on their English language improvement:

- I Cant Find Enough time to Involve myself into other ways to improve my english, though i am really so keen on improving my english, especially the listening skills...After a while Because of the over burden the student totally gives up learning English and accepts the little that he knows.

- I have many plans to improve but have no time to carry out.. I want to improve my English and make some friends with native English speakers, but there is little chance to communicate with them and I don’t know how to make friends with them. Sometimes I wonder will they avoid me since my English is not good and hard to understand.

- Well, because I don’t have a good command of English, so I am currently struggling with my study, and thus I don’t have any extra time to improve my English, it is not I don’t want to improve, it’s simply I don’t have enough time.
There is huge divergence in English language skills between Local and International student. It is unlikely to improve unless international student get out of their own cultural area… improving english through lectures is confined to very basic and formal english which is only internationally applicable english.

For me, I don’t get to speak English much at uni because unless I am doing a group work so I have to discuss something with my group members or have to give a presentation, otherwise I do my work at uni and go home, there isn’t much socializing with local students they seem to stick together like Chinese students do.

Some disenchantment was evident with students not being aware of services to help them, for example:

- I don’t clearly know what faculties provided by monash since they canceled CALT and don’t know what they do for helping international students improve their English.

- Universities do boast about forming clubs to help international students learn English but how many of them are actually successful in making students join these clubs.

- When i was in English bridging course, I had a chance to chat with others in english. But Im being in Uni course, I have less chance than before even none.

Interestingly, there was some evidence of the idea that language services are reactive rather than proactive, i.e., they are places to help with problems:

- They should emphasise the language and learning center as something more than a place where people go with "PROBLEMS". I used it just to improve my work, not to escape failing my subject.

Some respondents provided useful suggestions for further services such as: conversation groups with native speakers using formal and informal English; proofreading services; training in professional telephone manners; intensive Australian culture classes; classes on social interaction; arts or sports get-togethers with native speakers; individual help with assignments; private classes; mentoring by students who have experienced the same issues; and a language exchange where local students learn Mandarin for example (teaching each other their languages—mutual learning).

No doubt many of the participating universities are already providing these services or advising on access to them through another provider.

In contrast to the above results, a considerable proportion of students indicated that their course was helping them to improve their English, whether it be through the content (item 7, M 3.78, SD 1.111); through their assessment tasks (item 8, M 3.88, SD 1.068); through group work (item 11, M 3.76, SD 1.057); through tutorials/ labs/ seminars (item 12, M 3.72, SD 1.135) or by attending lectures (item 13, M3.68, SD 1.074). In particular they identified development of their reading skills (item 14a, SD 4.13, SD 0.972) and their listening skills (item 14d, M 4.10, SD 0.994).

Correlation with GPA

The only response that showed a significant, but again weak, positive correlation, to GPAs was item 6 ‘My written assessments include marks for good English’ (r = 0.100). This is important because it suggests that the attention of academic staff to English language skills may contribute in some way to students’ academic success. Of particular concern, however, is the finding that attendance at language and communication skills support services does not correlate positively or negatively with academic success.
Strategies to enhance academic performance

In this section we examine the strategies the participants use to help them perform well in their academic studies.

Analysis of Response Means

It is apparent from the mean responses (Table 9) that there are a number of strategies that the respondents use ‘sometimes’ or ‘often’, there are others that they use ‘rarely’. Of some relief to academic staff should be the result that few of the students who took part in our study ‘never’ or ‘rarely’ (M 1.83, SD 0.974) rely on friends’ lecture notes (item 11) or avoid lectures (item 12, M 2.07, SD 1.048). On a positive note, considerably more students are often trying to find links with prior knowledge (item 16, M 3.67, SD 0.926).

Table 9: Strategies used to enhance academic performance

Scale: Never [1], Rarely [2], Sometimes [3], Often [4], Always [5]—‘Not Applicable’ removed

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Form a study group with same language group</td>
<td>2.45</td>
<td>1.223</td>
<td></td>
</tr>
<tr>
<td>2. Form a study group with mixed language background students</td>
<td>2.74</td>
<td>1.244</td>
<td></td>
</tr>
<tr>
<td>3. Discuss understanding of readings and lectures with English-speaking friends</td>
<td>2.82</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>4. Discuss understanding of readings and lectures with non-English speaking background friends</td>
<td>3.13</td>
<td>1.082</td>
<td></td>
</tr>
<tr>
<td>5. I ask my English-speaking friends to check my assignments for errors</td>
<td>2.31</td>
<td>1.223</td>
<td></td>
</tr>
<tr>
<td>6. I read my assignments out loud to help identify my errors</td>
<td>2.44</td>
<td>1.233</td>
<td></td>
</tr>
<tr>
<td>7. When I write an assignment, I:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Copy sections from my text books</td>
<td>2.21</td>
<td>1.036</td>
<td></td>
</tr>
<tr>
<td>b. Copy sections from my lecture notes</td>
<td>2.24</td>
<td>1.013</td>
<td></td>
</tr>
<tr>
<td>c. I try to use my own words to write about the ideas I have learned</td>
<td>4.13</td>
<td>.849</td>
<td></td>
</tr>
<tr>
<td>d. I read each sentence/paragraph through to myself as I write</td>
<td>3.70</td>
<td>1.082</td>
<td></td>
</tr>
<tr>
<td>e. I ask academic/study support people for help</td>
<td>2.43</td>
<td>1.200</td>
<td></td>
</tr>
<tr>
<td>8. I carefully read written feedback from my lecturers/supervisors to improve next time</td>
<td>3.94</td>
<td>1.036</td>
<td></td>
</tr>
<tr>
<td>9. I re-listen to audio/visual recordings of my lectures</td>
<td>2.51</td>
<td>1.228</td>
<td></td>
</tr>
<tr>
<td>10. I follow the lecture on a handout and add my own notes</td>
<td>3.87</td>
<td>1.058</td>
<td>.119**</td>
</tr>
<tr>
<td>11. I rely on friends to give me their notes on lectures</td>
<td>1.83</td>
<td>.974</td>
<td>-.127**</td>
</tr>
<tr>
<td>12. I don’t attend lectures and instead read the material</td>
<td>2.07</td>
<td>1.048</td>
<td>-.114*</td>
</tr>
<tr>
<td>13. I write notes in my own language</td>
<td>2.19</td>
<td>1.136</td>
<td></td>
</tr>
<tr>
<td>14. I write summaries of readings and keep these notes</td>
<td>3.05</td>
<td>1.120</td>
<td></td>
</tr>
<tr>
<td>15. I learn by going over new material again and again</td>
<td>2.85</td>
<td>1.054</td>
<td>3</td>
</tr>
<tr>
<td>16. When learning new material I try to find links to what I already know</td>
<td>3.67</td>
<td>.926</td>
<td>.106*</td>
</tr>
<tr>
<td>17. I try to do all of my assignments as soon as possible</td>
<td>3.14</td>
<td>1.043</td>
<td>.115*</td>
</tr>
<tr>
<td>18. I review things during the semester in preparation for exams</td>
<td>3.37</td>
<td>1.047</td>
<td></td>
</tr>
<tr>
<td>19. I only study for exams just before they happen</td>
<td>2.78</td>
<td>1.139</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Undergraduate Mean</td>
<td>Postgraduate Mean</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>20.</td>
<td>I prepare for exams by memorizing everything I can</td>
<td>3.15</td>
<td>1.108 4</td>
</tr>
<tr>
<td>21.</td>
<td>I work hard on a topic to completely understand it</td>
<td>3.57</td>
<td>.904</td>
</tr>
<tr>
<td>22.</td>
<td>I only study what I need to pass my course</td>
<td>2.81</td>
<td>1.010 5</td>
</tr>
<tr>
<td>23.</td>
<td>After class I read my notes to make sure they are clear</td>
<td>3.13</td>
<td>.980</td>
</tr>
<tr>
<td>24.</td>
<td>After class I check my notes with friends to make sure I understood correctly</td>
<td>2.44</td>
<td>1.022 6</td>
</tr>
<tr>
<td>25.</td>
<td>I test myself on important subjects until I understand completely</td>
<td>2.88</td>
<td>1.048</td>
</tr>
<tr>
<td>26.</td>
<td>I write down and remember exactly the statements and ideas presented by my lecturers</td>
<td>2.99</td>
<td>1.058</td>
</tr>
<tr>
<td>27.</td>
<td>I do the set reading and/or prepare in other ways before class</td>
<td>3.09</td>
<td>.918</td>
</tr>
<tr>
<td>28.</td>
<td>I come to class with questions that I would like answers for</td>
<td>2.79</td>
<td>.902</td>
</tr>
<tr>
<td>29.</td>
<td>I like to develop my own opinions about the content knowledge in my course</td>
<td>3.36</td>
<td>.975 7</td>
</tr>
<tr>
<td>30.</td>
<td>I complete academic tasks by breaking them down into smaller tasks</td>
<td>3.32</td>
<td>1.021 8</td>
</tr>
<tr>
<td>31.</td>
<td>When I have a problem understanding something in my course I ask my lecturer/tutor for help</td>
<td>3.60</td>
<td>1.020</td>
</tr>
</tbody>
</table>

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

1 Item 6 appears to be a strategy used less frequently (rarely/never) by postgraduate students compared with undergraduates (p=0.008). Nonetheless, only a small proportion of students in general used it ‘often’ or ‘always’ (~19%), despite the advantages of activating the oral, aural and visual senses simultaneously when reading aloud. A further 30% of UGs and 21% of PGs used it sometimes.

2 Item 7a: Significantly more (p=0.001) undergraduate students acknowledged that they copied text from books into their assignments. However, numbers were low (representing just over 11% of the whole cohort as seen in the low mean for the often/always Likert options), whereas those who ‘rarely’ or ‘only sometimes’ did this represented over 60% of the overall student cohort. This finding however does not necessarily suggest plagiarism as the copied material could well have been appropriately referenced – thus revealing a limitation of our survey instrument.

3 Item 15: This repetition strategy was used significantly more often by undergraduate students (p=0.002) but it was not a strategy that was popular with the majority of students overall—37% used this study method ‘never/rarely’ and a further 37% only ‘sometimes’.

4 Chi-sq analysis of item 20 on ‘memorizing before an exam’ showed that significantly more 18-23 yrs (p=0.001) did this – they were twice as likely as older students to use the strategy ‘always’ (17.8% cf 8.5%).

5 Item 22 on ‘studying only what is needed’ was used by significantly more undergraduate rather than postgraduate students (p=0.010).

6 Item 24: Significantly more young students (18-23 yrs) used this strategy often/always (p=0.013). Sadly however, the majority of the cohort (over 60%) only ‘rarely/sometimes’ checked their notes with others and almost 20% reported that they never did so.

7 Item 29: Chi-square analysis showed that significantly more students in the 24+ years age group used this strategy (p=0.009) (developing their own opinions about the content of their course). The biggest differences were in those who used the strategy ‘rarely’ (younger 18%/older 10%) and ‘sometimes’ (younger 40%/older 46%). Interestingly some 43% of the full cohort only reported doing this sometimes.

8 Item 30: A good management strategy was used significantly more often by older students (p=0.031).

Further analysis of the mean responses shows that a considerable number of the students participating in the survey are attempting to paraphrase (item 7c, M 4.13, SD 0.849) and edit as they write by reading each paragraph upon its completion (item 7d, M 3.70, SD 1.082).

Also encouraging for staff is the result that shows the relatively high level of attention given to written feedback (item 8, M 3.94, SD 1.036). Other strategies which are frequently used, which may be reassuring for academic staff, include item 31, ‘when I have a problem understanding something in my course I ask my lecturer/tutor for help’ (M 3.60, SD 1.020); item 27, ‘I do the set readings and/or prepare in other ways before the class’ (M 3.09, SD 0.918); item 29, ‘I like to develop my own opinions about the
content knowledge in my course (M 3.36, SD 0.975); and item 30, ‘I complete academic tasks by breaking them down into smaller tasks (M 3.32, SD 1.021).

Correlation with GPA

Several strategies for academic success on Table 9 were found to correlate in a significant and positive way (however, once more the correlations are very weak): item 10, ‘I follow the lecture on a handout and add my own notes’ (r = 0.119); item 16, ‘when learning new material I try to find links to what I already know’ (r = 0.106); and item 17, ‘I try to do all of my assignments as soon as possible’ (r = 0.115). These strategies relate to metacognitive and organisational skills and also reflect the development of autonomous learning approaches.

In contrast, some strategies showed a small but very weak negative correlation with students’ GPAs: item 22, ‘I only study what I need to pass my course (r = -0.136); ‘I rely on friends to give me their notes on lectures’ (r = -0.127); item 12, ‘I don’t attend lectures and instead read the material’ (r = -0.114) and item 22, ‘I only study what I need to pass my course’ (r = -136). These strategies suggest both a lack of effort and of motivation. Item 12 in particular stands out as contrary to the advice of the teaching staff we interviewed—their best advice to international students (and indeed to all students) who want to pass their course was simple: “attend class”. In addition, as strategies that most would describe as undesirable, the negative results provide further support for our claim that our instrument is both internally consistent and reliable.

Thus there are clearly approaches to academic achievement that are desirable and conversely less desirable. Further these are quite distinct from language learning strategies. Desirable academic learning strategies are those which require some focused attention, i.e., consciously linking new knowledge with existing knowledge, and being organised with assignments and note-taking on lecture handouts. Conversely, and as shown previously, desirable language learning skills for those in higher level studies seem to be those that help learners to achieve more holistic understanding, and so are more socially and communicatively global in orientation, rather than involving the organisation of detailed and focused word/sentence level strategies.

Motivation for developing English skills

In this section we sought to determine how strongly the participants felt about developing their English proficiency and their reasons for doing so.

Analysis of Response Means

The agreement scores of the participants indicate that our participants were motivated to learn English for a range of reasons. In fact, a number of items in Table 10 showed means over 4.0 (agree to strongly agree) and low SD (suggesting as a group the participants did not vary widely in their responses). These included future employment opportunities (item 1a), mixing with English speakers (item 1c), getting the most out of studying in Australia (item 1d), wanting to be good at English (item 6) and understanding Australian life and culture (item 1e). Strong agreement was also evident with enjoying using English (item 4) and wanting to be fluent in English in order to know Australians better (item 3).

In support of these findings, open-ended question responses in this section were numerous and provided an insight into what motivates international students in Australia. Motivators included career opportunities, self-development and self-expression, cultural understanding, entertainment, a love of language and learning, migration opportunities, social inclusion (friends and relationships), social status, and travel opportunities. Social opportunities and self-expression featured strongly:
- Understanding every single words/ sentences that are coming out from a movie is the strongest motivation for developing my English skill. When a native English speaker is laughing at a scene in in a cinema whilst I don't, I feel so desperate.

- Music and entertainment is a strong motivator.

- One of the reasons that I push myself hard to learn to speak better English is because I want to have more Australian friend. Sometimes hang around with ESL student can be boring.

- I love reading books and gaining knowledge. Most of the materials are written in English and therefore developing English gives me an advantage in selecting various types of books. I also like to listen to musics and English songs have more variety and more entertaining than songs in my own language.

- English allows us to communicate with people from different countries, not only Australian people. And I really enjoy talking especially with and knowing people from different cultures.

- Making new friends with English speaking students motivates me to improve my English, but I find it hard to be close to them, or make jokes, or anything else that I do with friends from the same language background.

- We need time to understand what lecture told in English first, but we always lack time to interpret their meaning and think about more even lack time to ask questions. About the reading, we read very slowly and could not wholly understand what the authors real meaning.

Table 10: Motivation for further developing English skills

<table>
<thead>
<tr>
<th>Item*</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continuing to develop my English is important to me because:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. It will improve future employment opportunities</td>
<td>4.59</td>
<td>.704</td>
</tr>
<tr>
<td>b. I want to apply for permanent residence in Australia</td>
<td>3.70</td>
<td>1.199</td>
</tr>
<tr>
<td>c. It will help me mix socially with other English speakers</td>
<td>4.41</td>
<td>.745</td>
</tr>
<tr>
<td>d. It will help me get the most out of my studies in Australia</td>
<td>4.42</td>
<td>.747</td>
</tr>
<tr>
<td>e. It will help me to better understand Australian life and culture</td>
<td>4.25</td>
<td>.823</td>
</tr>
<tr>
<td>f. I will be seen as well-educated</td>
<td>3.99</td>
<td>.948</td>
</tr>
<tr>
<td>2. Continuing my English is NOT a high priority for me*</td>
<td>1.84</td>
<td>1.019</td>
</tr>
<tr>
<td>3. The more I get to know Australians the more I want to be fluent in their language</td>
<td>4.07</td>
<td>.917</td>
</tr>
<tr>
<td>4. I really enjoy using English</td>
<td>4.06</td>
<td>.815</td>
</tr>
<tr>
<td>5. I prefer to spend my time on the content of my course than developing my English.</td>
<td>2.93</td>
<td>1.051*</td>
</tr>
<tr>
<td>6. I want to become so good at English that it comes easily to me</td>
<td>4.26</td>
<td>.893</td>
</tr>
<tr>
<td>7. I only want to learn enough English to complete my course</td>
<td>1.91</td>
<td>1.084</td>
</tr>
</tbody>
</table>

*Note: For items 2 and 7 low scores indicate a positive attribution (i.e. English is a high priority for students and they want to learn more than just enough English to complete their course).

**There were no correlations between responses to Section 3, item 11, and GPAs.

*Item 5: showed a significant difference between groups, for both age (p=0.002) and level of studies (p=0.002). PG (39.6%)/older (39.1%) students (especially PG Research) were significantly more likely than UG (27.6%)/younger (26.4%) students to disagree/strongly disagree with this statement. Developing their English language skills appears to be more a matter of utility for UG students (enough to get through) whereas PG students recognise the value of the journey as well as the goal.

One student interviewee was particularly aware of how her attitude to English and her motivation for learning it had made a real difference in her ability to master it:
Before I came Australia I really hate English, yeah I always fail my English exam and I got really bad score off English test…It make me feel I have no any talent to study any language. But now I know you don't need talent, just doing something and something will be changed. [What do you have to do?] You can’t hate the language and you can’t have the negative attitude of studying the language. And the second thing is to make the listening and writing to be part of your daily life and keep doing something. Keep listening, keep speaking, keep writing…..

....I failed all my English course in my university—it was really shame. Actually I don’t think I am a good language user because it was really hard for me, so sometimes I really hate English actually before I came here. But when I came here I start to really think about language and culture and I felt it was really attractive. I also like American drama so sometimes I watch it and also go out with my friend to watch movie, so I think it also make me to think about the language, it was really neutral thing so actually I can't hate it anymore so I think I make progress.

This demonstrates perfectly Bandura’s (1984) suggestion that students’ self-efficacy beliefs can have a significant effect on their accomplishments in language learning.

For others, permanent residency and access to future employment and security are the main motivators:

- I think for most friends, applying for PR us the most important motivation.
- Firstly, if I have an excellent English skills then this will help me to get a job in very good company. Secondly, excellent English skills will help me to get marry with well educated girl in future :) Thirdly, I want to secure my future.

The notion of surviving in a foreign country was also reported as a motivator for improving one’s English as was the recognition of the global status of the English language:

- Simply being able to converse fluently in English will allow me to be more confident about being in a foreign country. As well, it will be difficult for me to communicate with other people (including store clerks, librarians, lecturers, etc.) if I do not understand them well. It's all about survival.
- English is an international language. Learning English is a must if we want to get the most of anything in this world.

Further support for the internal consistency of our instrument is shown by the similarly low means for item 2. ‘Continuing my English is not a high priority for me’ (M 1.84, SD 1.019) and item 7 ‘I only want to learn enough English to complete my course’ (M 1.91, SD 1.084).

Correlation with GPA

None of the results for motivation for developing English skills correlated in any way to the students’ GPAs. This suggests that, at least for international students in this study, English was “a means to an end”, i.e., a means to achieve one’s degree, rather than being the major focus of their attention and so the lack of correlation to their GPA might occur because students’ motivation is directed to their academic studies rather than to developing their English. Further research in this area might investigate any correlation between motivation and academic success in the competing environments of learning English and learning academic content. Despite these results, qualitative responses show considerable motivation for improving English, often because a clear link is made between this and academic success:
I am studying nursing... if I am not good at English, it's really dangerous for patients because everything we do is relate to their lives.

Beliefs about Learning English

Our survey collected information on students' beliefs about how best to learn English (Table 11). This included beliefs about their own ability; beliefs about the ease of learning one skill (e.g., reading, writing etc) rather than another; and the importance of vocabulary, grammar, pronunciation, correctness, and practice.

Table 11: Beliefs about learning English

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Significant Correlations with GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. English is an easy language to learn</td>
<td>3.24</td>
<td>1.037</td>
<td></td>
</tr>
<tr>
<td>2. I believe that I can become highly proficient in English.</td>
<td>4.02</td>
<td>.834</td>
<td></td>
</tr>
<tr>
<td>3. It is easier to speak than to listen to English</td>
<td>2.68</td>
<td>.975</td>
<td></td>
</tr>
<tr>
<td>4. It is easier to read English than to speak it</td>
<td>3.57</td>
<td>1.001</td>
<td>.119**</td>
</tr>
<tr>
<td>5. It is easier to write English than to read it</td>
<td>2.48</td>
<td>.903</td>
<td></td>
</tr>
<tr>
<td>6. You need to understand about English speaking cultures in order to understand English</td>
<td>3.44</td>
<td>1.038</td>
<td>.157**</td>
</tr>
<tr>
<td>7. Developing my vocabulary is an important activity for improving my English</td>
<td>4.21</td>
<td>.797</td>
<td></td>
</tr>
<tr>
<td>8. Developing my grammar is an important activity for improving my English</td>
<td>3.97</td>
<td>.872</td>
<td></td>
</tr>
<tr>
<td>9. Learning a language is different from learning other academic subjects</td>
<td>3.87</td>
<td>.920</td>
<td></td>
</tr>
<tr>
<td>10. It is important to speak English with excellent pronunciation</td>
<td>3.86</td>
<td>.952</td>
<td></td>
</tr>
<tr>
<td>11. You shouldn't say anything in English until you can say it correctly</td>
<td>2.07</td>
<td>1.036</td>
<td>-.108*</td>
</tr>
<tr>
<td>12. It is important to repeat and practice a lot when learning a language</td>
<td>4.34</td>
<td>.780</td>
<td></td>
</tr>
<tr>
<td>13. If beginning students are allowed to make errors in English, it will be difficult for them to speak correctly later</td>
<td>2.67</td>
<td>1.203</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation significant at the 0.01 level (2 tailed)
* Correlation significant at the 0.05 level (2 tailed)

1 Item 5 showed that significantly more undergraduate students (p=0.014) agreed/strongly agreed that it is easier to write than to read English. However, as the mean indicates, this represented only a small proportion of the overall cohort: more than 75% either disagreed/disagreed strongly, or were neutral. This suggests the writing presents a major difficulty for a number of respondents or that they are simply not reading enough to overcome difficulties with this skill.

2 Item 6: Older (58.3%) and PG (58.5%) students were significantly more likely than younger (45.3%) UG (46.7%) students to ‘agree/strongly agree’ with the statement ‘You need to know about English-speaking cultures in order to understand English’ (age p=0.006; level of study p=0.014), a belief that correlates positively, but weakly, with enhanced GPAs.

Analysis of Response Means

There were a number of beliefs that the participants showed strong support for, and many others that were supported, although with less strength of agreement. One item with a mean of greater than 4.00 and with a low SD was item 2 ‘I believe that I can become highly proficient in English’ (M 4.02, SD 0.834). This result suggests the students enjoy high level self-efficacy when it comes to their belief about their “English language growth” potential. The result again supports our suspicions of a self-selecting sample, i.e., the more confident and able students being more likely to participate in
and complete such a survey. These views were strongly supported in the qualitative responses:

- I believe it to be one of the most beautiful languages ever created by mankind, Seriously. Try reading any titles by Alexander Mc-Call Smith should you think otherwise.
- Learning language is fun. I feel regret I couldn’t learn more languages when I was young. Now it is difficult for me to learn another foreign language. Compared to other students, I have a good foundation of English and I am doing the TESOL program. I wish I can be professional in English language study and help more Chinese learn English better.

Other strong responses support these high expectations, e.g., item 7—developing vocabulary (M 4.21, SD .797), item 8, developing grammar skills (M 3.97, SD 0.872); item 9, learning a language is different from learning other subjects (M 3.87, SD 0.920), item 10 having excellent pronunciation (M 3.86, SD 0.952); and item 12, practising a lot (M 4.34, SD 0.780).

**Correlation with GPA**

In contrast to the absence of correlation results for motivation, there were three beliefs about learning English that correlated in significant positive and negative ways with the students’ GPAs. However, again the correlations were weak. These included the belief that ‘It is easier to read English than to speak it’ (item 4) (r = 0.119). Another weak, but positive correlation with GPAs was the belief that ‘You need to understand about English speaking cultures in order to understand English’ (item 6) (r = 0.157) which suggests the importance of learning the language within its cultural context.

Clearly this is an important issue for lecturers who may need to consider explicitly integrating explanations about the cultural differences of their discipline areas if they are not already doing so. This is a teaching strategy that would go some way to the internationalisation of the curriculum in that it makes the English speaking culture more accessible to students from non-English speaking backgrounds. The importance of cultural understanding was strongly confirmed in the qualitative data and is clearly an area where further support can be provided for current and potential students.

The third belief that ‘You shouldn’t say anything in English until you can say it correctly’ (item 11) showed a weak negative correlation with GPAs (r = -0.108). This result enhances previous findings relating to risk taking being associated with success (see discussion of Table 7). This result also reflects the students’ assessment about the importance of engaging socially—which naturally requires a level of risk taking (see Bernat & Lloyd 2007).

**Conclusion**

Overall our respondents rated themselves reasonably highly with respect to their English language skills. This of course may be because only those with better skills had the confidence and skills to actually complete the survey, i.e., the population self-selected to a certain extent. Participants appeared to be honest in the description of their use of English, which was particularly evident in the qualitative data collected through open-ended questions.

Whilst the students participating in this study saw the need for good English language skills, they also generally believed that they could achieve well academically with their current level of English. Again this might be a result of the self-selecting nature of the sample. As international students under pressure of time and money, it is not surprising that for most, their motivation for improving their English seemed more instrumental i.e., for specific achievement, rather than as an end in itself. Nevertheless, there were
several students who were motivated simply by a desire to learn English for its own sake or for self-expression.

Of particular importance was the value placed on cultural understanding and the connection between cultural knowledge and language proficiency. Increasing cultural knowledge is something that has been addressed by support services for many years now, although it is often something that is not high on the students’ agenda and such sessions are often poorly attended. This suggests that cultural understanding may be better developed if addressed through units of study. We have demonstrated already that marks provided on assessments for English language ability correlate positively with GPAs. Integrating cultural understanding into the discipline, if already not done, may further enhance students’ cultural knowledge and, in turn, their English language skills and academic achievement.

Correlations with GPAs were weak overall, supporting a number of other studies that have suggested a dynamic complex of factors that contribute to a students’ academic success. However, where there was correlation of GPAs with language learning strategies, it seemed to relate to developing global understanding through social and communicative approaches and the element of risk taking that this involves. On the other hand, correlation between academic strategies and GPAs seemed to relate to making connections with prior knowledge and being organised with notes, assignments, etc.
5. Strategies for English Language Growth

One of the main aims of this project was to identify strategies that international students use to develop their English (i.e., to maintain their on-going “language-growth”) and in turn to enhance their academic achievement. These strategies were identified using an online survey that drew heavily from established research on language learning strategies (see Section 3: Methodology and Demographics for details). Results were correlated with Grade Point Averages (GPAs), or conversions of equivalent measures, to allow us to identify strategies that appear to be associated with successful academic learning (i.e. higher GPAs) and those that are not. Open-ended questions within the survey also generated considerable advice from students on strategies used, over and above the survey items correlated with GPAs. This section reports on both quantitative and qualitative findings and also brings to light relevant information from the literature.

In the course of the data collection, we had requests from students who felt they lacked appropriate strategies and/or wanted to try out new ones from the survey. Therefore a facility enabling students to download each page of strategies, which were continually uploaded to the website, was built into the website. This met the students’ desire for a ‘take-away’ commodity. A CD ROM resource is also provided as a deliverable from this project. It contains a strategy checklist for students to print out and use so that they can review the many strategies described in this electronic resource.

Although our statistical analysis did not find that many of these types of strategies correlated with academic success as captured in the students’ GPAs, students themselves claimed nonetheless described a range of strategies that were useful to them. Thus our survey supports the notion that academic success is determined not by individual strategies alone but by a whole complex of variables (see also e.g., Fox 2004; Phakiti 2008).

Section is organised as follows: first suggestions for ‘Academic and language learning strategies’ are presented; next is ‘affective variables’, consisting of a number of subsections, followed by ‘speaking and listening’ and ‘developing grammar’. The section is concluded by a section on ‘building vocabulary’ (because of the breadth of this area, a number of subsections are included).

Academic and Language Learning Strategies

Students offered a range of strategies for enhancing academic learning as well as their language learning. Although these are two distinct constructs, in the international student context there are many times when the two overlap and for this reason we have combined them here. Further we have presented these strategies according to O’Malley and Chamot’s (1990) classification system as it provides a useful organisational system that strongly reflects the way our participants described such strategies—namely social strategies (those that involve social interaction), cognitive strategies (those using new knowledge or language), and metacognitive strategies (strategies to organise learning).

Even so, we acknowledge that within a higher education context strategy use is more frequently categorised under learning approach labels such as ‘deep’, ‘surface’ and ‘strategic’ (after Biggs 1987; Entwistle 1987; Biggs 1993; Biggs 1999). A deep approach embodies interest in the academic task and enjoyment from it, a search for inherent and personal meaning in the task, integration with existing knowledge, and generalisation based on the knowledge gained from the task. A student using a surface approach on the other hand will view a task as an imposition, not make connections with other knowledge but rely on rote-learning, worry about the time the task will take,
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and avoid generating deeper understanding. Not surprisingly, many scholars have suggested that different tasks require different strategies and even so-called low-level strategies such as rote learning have their place in academic study showing students to be strategic or achieving learners (Biggs 1993, 1999). Hence Biggs’ third approach is an ‘achieving’ or ‘strategic’ approach, whereby the student employs either a deep or surface approach depending on the type and value of the task. For example, “[a] learning strategy that is valued in one learning context may well be deemed inappropriate in another context. In other words, an individual learner’s strategies and activities are often determined not only by his/her own predispositions, but also by the social context where learning occurs” (Gu 2005).

In addition to this, it has been pointed out that memorisation does not necessarily result in surface learning. Cooper (2004) for example, provides evidence of “memorization with understanding”, that is “memorization through repetition can be used to deepen and develop understanding” (p.294). Cooper shows that Chinese students (generally stereotyped as surface learners) exhibited higher SPQ scores for both surface and deep learning approaches than Australian students. Interestingly, for Chinese students there was a positive correlation between both approaches and academic performance while for Australian students there was a positive correlation only between deep approaches and academic performance.

Other research alerts us to strategies that are not productive. Cantor (1990) for example distinguishes between ‘optimistic’ strategies among university students who prepare for a test by eliciting self-verifying feedback and social support, selectively recalling personal achievements, etc, and a ‘defensive pessimistic’ strategy whereby students “lower their performance expectations before starting the task” (p.743) and thus prepare themselves for “failure outcomes” (ibid), in spite of their hard work. Eronen, Nurmi and Salmela-Aro (1998) found however that during the first two years of university study optimistic students passed fewer courses than defensive-pessimistic students, but in the long term optimistic students were more successful. Heikkila and Lonka (2006) in their study of 250 university students found that “[f]avourable aspects of students’ learning—deep approach, self-regulation of learning, and optimistic strategy—clustered together, while problematic aspects, such as surface approach, problems with regulation of studying and self-handicapping, were also related to each other” (p.113).

Therefore cognitive, metacognitive and social learning strategies from second language learning (SLA) research, the organising constructs we have elected to use, are not easily reconciled with the learning approaches most popularly studied in higher education. This is because deep, surface or strategic approaches will all include cognitive, metacognitive and social learning strategies in various degrees. For instance, one would expect that a deep learner would use more metacognitive strategies while a surface learner would employ a range of low-level cognitive strategies (e.g., memorizing). However, as we have indicated, we have used these categories because they are the most useful for organising the responses we received from our participants—probably because the tasks of academic learning and language learning are so closely linked for this cohort.

Furthermore, research into learning strategies in the SLA field invariably focuses on strategies to enhance the development of the second language itself: indeed this is a major concern for international students from non-English backgrounds in our universities. Little, if any, research focuses particularly on “strategies to enhance the use of one’s second language as a learning resource for disciplinary study in a second language” (Skyrme 2005). Andreou, Andreou and Vlachos (2005), however, make a connection between the strategies of language learning research and those of learning in higher education. They propose that “metacognitive awareness” and “academic self-confidence” are added to Biggs’ learning approaches. For Andreou et al (2005),
metacognitive awareness is “students’ awareness of effort in studying and the value of memorizing as a learning skill”. Academic self-confidence “refers to students’ faith in ability to look for meaning and determination to excel” (p.30).

Our study therefore takes some initial steps in this direction by investigating any relationship between strategies used to improve language proficiency and academic success.

Social Strategies

Social learning strategies are so named because they involve interaction often with other learners or with experts (teachers, lecturers, tutors etc). Social strategies include discussing problems with friends and checking understanding with tutors and/or lecturers either face-to-face or online, and establishing learning groups. Many of our respondents reported using such strategies:

- *Discuss academic problems with friends who are easier understand my point. Homework is really important to check if you understand the chapter or not.*
- *Discuss with course mates about lecture slides that i don't understand and going to pit stop tutorials definitely helped.*
- *During a lecture, tutorial or lab class, I usually check my notes with friends to see if I have understood everything.*
- *i usually ask friends, either english speaking background or not, whenever i have problem understanding something in my course*

Whilst some of our participants described informal contact with other students, others indicated that they organised more structured and formal groups. This concurs with reports in the literature that suggest study groups are widely favoured by international students. For example, Renshaw (1995) found South-East Asian students resorted to this sort of social study support, in contrast to local (Australian) students’ preference for studying alone. Moreover Renshaw’s (1999) later Australian study demonstrated that the nature and function of informal study groups had an improving effect on not just students' academic success, but also their emotional adjustment to university. Ramsey, Barker and Jones (1999) note that self–initiated study groups are often generated from tutorial class contacts and emerge towards the end of the semester or year. Students gain motivation and encouragement from their study groups, in addition to the sharing of resources (p.136). For international students, the benefits of study groups also includes getting feedback on assignment drafts and developing critical thinking skills (p.136). This may be a strategy that universities can assist in developing by helping to organise events or putting in place structures that enable groups to form. Naturally we acknowledge that study groups and “buddies” are frequently established by lecturers in many units/courses already.

In addition, Hong-Nam and Leavell (2006) have found that the mode of teaching itself can influence the use of social strategies: for example, if group tasks and interaction are supported in an Intensive English Program classroom, students will often continue these connections outside that classroom. Similarly, relationships established in tutorials often result in on-going learning groups outside the classroom. Other useful approaches include the use of Socratic dialogic teaching and explicitly encouraging critical thinking, and the introduction of tasks that promote understanding of Australian cultural values and western conceptions of learning (see Campbell and Li 2008; Kingston and Forland 2008).

We found that group learning is very common and highly recommended by the international students in our study. For example, several student responses demonstrated the positive impact of forming a study group.
• **Group study is a good idea for improving english and learning another point of view from your friends**

• I think if friends got together and discussed the chapters that are going to be taught, it would help in understanding the concepts better.

• **In reading—if it is something really important, we have a study group and usually we discuss the readings (half-half English Chinese). The advantage of having a study group is that you share the burden but you also have your obligations, you have to contribute.**

Unfortunately, not all students are successful in finding other students willing to form a study group:

• **It seems that everything is busy, i feel very difficult to talk deeply with anyone about a particular topic even it is about study. People always say "you can ask someone else" or "I am not quite sure". I always do not have a reliable study group, people do not want to share their time and experience with sb who they do not know very well. So, as an international student, I felt that i was left out.**

Group discussions, as part of a tutorial class, are another kind of social learning environment. They may occur as part of peer learning or collaborative learning and are claimed to provide a secure, comfortable and supportive learning environment and are invariably suggested as particularly appropriate for minority group students. Gupta (2004) notes the importance of group discussions for developing individual accountability and work-life experience. Furthermore, Campbell and Li (2008) report that:

Most Asian students highly valued the significance of classroom group discussions where they could interact with students from other cultures and backgrounds. They saw them as opportunities to improve their English language skills, to enhance their cultural understandings through such intercultural encounters, to broaden the understanding of the course or assessment-related issues, and to develop their negotiating, teamwork, interpersonal communication skills, and possibly to make friends (p.384).

However, our qualitative data tends to contradict the idea that group discussions always provide a comfortable and supportive learning environment:

• **I find some lecturers at seminars speaking too fast and sometimes with certain unfamiliar expressions that completely get lost on me. I’m therefore unable to even ask questions when I don’t in the first place hear what has been said.**

• **I found it is difficult to study in a tutorial class which is conducted in a discussion bases. This is because the non native speaker seldom have a chance to express their opinion.**

• **Although I feel confident with my language ability, sometimes I'm anxious to speak in my class. My anxiety sometimes influences me so much that I prefer to stay silent during discussion, especially when others are much more fluent than me.**

• **I'm kind of panic especially when I'm in a tutorial class, there are only aussie students who speak really fast. I can't properly participate to discussion.**

Regardless of the above, some students reported that they felt they had improved as a consequence of participating in such interactions:

• **In discussions during tutorials, I find it hard to express myself well in English. I stutters and struggle to find the words to describe something. My brain need to**
process words. Well, it's not that bad now. I'm progressing and improving my speaking skills...language.

- sometime I also find little bit difficulties to particate in group discussion or class room discussion because of my level of command in English language. But I am managing to do it. Third thing is that sometime I can't understand what the other person is saying to me; specially when I talk with native English speakers. Fourth thing is I do also have strong accent.

However, a lack of specific support and tolerance in the classroom was mentioned:

- Some more consideration offered to non-English speaker in the class would be much appreciated as this might be reasonable to all Australian education provider who well-prepared to accept enrollment from non-English speaker while those international student paid doubled school fee in order to learn English....We could do better if the fellows are tolerant to us.

Nevertheless, it was evident from the quantitative findings in Section 4 of this report that students certainly felt more comfortable to express themselves in smaller groups than they did in large classes. Students offered just a few specific strategies to overcome difficulties in the social learning environment of class discussions:

- Join Toastmaster's club, try to make friends and do group assignments with people from different cultures.
- i used to have sunday meeting with friends who come from different countries, most of us are Asian. This meeting was held from morning till noon on sundays. we have different topics to discuss every week and presentation by one or two members about their own cultures as well. i found it is a very useful and interesting way to learn english.

In fact the implication overall in the qualitative data was that social learning skills were not being taught or developed (or at least, that students often did not know what was available in this area). The greatest need identified by students for language and communication skills support from their universities was to develop speaking skills (particularly through interaction with local students) and to provide an introduction to Australian slang and culture:

- I reckon it's very important to be able to speak emglish comfortably if you want to perform to your best but because of lack of speaking skills student hesitate to ask doubts and always find it difficult to take part in discussion going on in the class and keeping their own point of view about the subject....I dont even know if they provide any help of this sort.I never heard of it.
- Spoken english is really important in communicating with patients and other health care professionals...providing more opportunity in speaking (e.g., presentation, group work or discussion)...[LCS needed] regular on campus language support, focusing on Australia Culture (in terms of speaking and listening).

With respect to gender, early research reported females’ greater use of social learning strategies such as group learning (Politzer 1983; Ehrman and Oxford 1989). However, other research suggests that it may be the result of individual differences. We observed in our study that some students were more strategic in their social learning approaches and contacted students who had done their unit/s before:

- talk with some students who are from my country and if they have already enrolled in some subjects before,then i want to know their experiences.
- Well, I talk to friends who stayed and studied in Australia longer than me, and try to learn something from them.
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Others were prepared to approach their tutors or lecturers:

- *I am doing research on my own and discuss with my supervisor for any difficulties. While discussing, my main problem is listening and speaking fluently. He can understand me but I wish I can speak more fluent.*
- *If there is something unclear for me or I don’t understand what lecturers or tutors, I always ask them to clarify for me without being shy or pretending to understand those information.*

Anecdotal evidence, however, suggests that many international students may either be too shy to approach their lecturers and tutors and/or have difficulty in formulating questions in English of what they don’t understand. This may also occur because they fear ‘loss of face’ or have negative self-efficacy about their English or academic ability. This too was reported in our data.

- *Even if my lecturers or tutors say "ask if you have any question" or "let me know if you don’t understand", it is hard to ask question when I can’t explain what I don’t understand or once I get confused in the class and just can’t understand most of the things they say.*
- *Even if I ask doubts to my lecturers, they speak so fast and with accent that it is not worth asking anything.*

Clearly there is much that universities, and particularly teaching staff, can do to support international students. For instance, simply providing online opportunities for students to ask questions (which allows them the time to formulate their questions and to reflect on answers) alleviates some of the difficulties that they can encounter in face-to-face contact with lecturers or tutors. Providing structures that enable study groups to be developed, such as through tasks begun in class time or setting up Wiki groups, would be other positive steps to address student need. At the very least there is clearly a need for explicit statements to be made so that students are aware of what help is available (and providing this information in both written and oral form). There is ample evidence that, given the right support, international students can and do adapt and become more comfortable in their new learning environments (e.g., Volet, Renshaw et al. 1994; Fox 2004; Handa and Power 2005; Alazzi and Chiodo 2006), and that many of the difficulties they face are more a product of context rather than culture (e.g., Volet and Renshaw 1995; Ninnes, Aitchison et al. 1999; Gu 2005; Cross and Hitchcock 2007).

**Cognitive Strategies**

Cognitive strategies are learning strategies whereby the knowledge itself is deliberately manipulated to improve learning, for example, repetition, summarising, guessing meaning, categorizing, and, making inferences based on prior knowledge. Cognitive strategy use has been widely studied, particularly in the area of language learning. Ehrman and Oxford (1995) for example have shown a significant correlation between cognitive strategy use and proficiency rate, they also link motivation as a variable which will impact on cognitive strategy use.

Among the cognitive strategies offered by our participants was the assimilation of new knowledge by making connections with prior knowledge:

- *I always understand all the materials and find the relationships and applications with my past studying and life experiences.*

Others saw the importance of reading widely to ensure understanding of key concepts. Interestingly these students also suggested going beyond what is prescribed by the
lecturer to websites or other books on the topic. The importance of reading widely was also stressed by teaching staff interviewed for this project:

- I thoroughly read my textbooks and lecture notes. and where some points I needed more to understand well, i search up the websites in different ways. so I could look at things from different views, other than what only lecturers give us
- If I can't understand the theory, I go to library and look at other books because the theory is same but the way that the writer presented is different. Sometimes it gives me better understanding of my study.
- I often try to find books related to the subject I am learning so as to have multiple meanings of a topic and then I try to find out the similarities from all of them.

There was also evidence of students developing a basic understanding by way of the simpler text in a textbook, before going on to journal articles:

- i prefer using textbook rather than reading journal because the textbook have a clear structure (chapter), the language is easy to read. so i have a basic idea before i could read the journal.

Preparation for class was also deemed important:

- Always have something in my head before going to class, and discuss and give opinions as much as I can during classes
- I will preview the lecture materials before my lecture and also review them again after the lecture to ensure myself completely understand as much as possible.

Additionally reviewing and note-taking were included by students as effective cognitive strategies while rote learning was not. There was also specific rejection of memorizing.

- The strategy to support my academic performance is by keep on reviewing the previous materials which are quite hard to be understood.
- I write down everything i need to understand as i can understand things written by me better. I also try visualise or draw diagrams when reading to help me understand.
- dude, I don't 'memorize' the materials, I try to 'understand' them. memorizing is for people who want to 'pass' instead of to 'learn'.

Metacognitive Strategies

Metacognitive strategies refer to those which involve self-regulating one’s learning, such as time-management (e.g., meeting assignment deadlines or knowing lecturers’ office hours); ascertaining gaps in one’s knowledge; identifying weaknesses (for example with writing) and addressing them, or evaluating one’s improvement or success. These have also been described by Oxford (1990) as indirect language learning strategies which involve “the general management of learning” (p.15) (see also Gu and Johnson’s research described below in the section on building vocabulary). Examples from our corpus include:

- read textbook and do the assignments given as soon as possible are good ways to improve my academic performance, and also ask lecturers by email or ask them directly after class or during lectures can improve my understanding about my course.
Also included in metacognitive strategies are conscious efforts to understand the culture of the university, of one’s discipline area and of the host country in general. A general lack of knowledge about the Australian economy or media issues for example was seen as detrimental to study.

- I don’t have background about Australian economic so that sometime it was really hard for me to catch up when the instructor introduced something new based on something already happened before in the economy.
- What makes me feel difficult is the familiar with culture and local community. I do not know too much about Australian or American media.
- Listen to news in radio is a good way to improve listening skill and broaden your knowledge of Australian culture.

Another metacognitive strategy is being conscious of maintaining motivation. Many students are motivated by the opportunity to gain permanent residency in Australia others by the prospect of a good job.

According to Paris and Winograd (1990), metacognition focuses our attention on the role of awareness and executive management of our own thinking. Metacognition helps learners become active participants in their own performance rather than the passive recipients of instruction and imposed experiences (p.18). Bonney, Cortina, Smith-Darden and Fiori (2008) describe metacognitive knowledge “as having an awareness of strategies and task characteristics, or “knowing about thinking”. Metacognitive strategies include students’ monitoring of progress, regulating their own behaviors and cognitive processes, and planning” (p.3).

As far as language students are concerned, O’Malley, Chamot, Stewner-Manzanares, Kupper and Russo (1985) found that cognitive strategies were more widely used than metacognitive strategies by beginning and intermediate learners. This is clearly because of the steep learning curve involved in mastering the basics of a new language. Even so, the statistical data in our findings section showed a small but positive correlation between more organisational (metacognitive) strategies and academic success, suggesting the utility of employing such approaches. With respect to gender differences, Oxford (1993) notes that female language learners are more likely to use metacognitive strategies (e.g., planning, evaluating and organising) than males. Other research has also found that correlations between metacognitive strategies and language proficiency are variable (Ehrman and Oxford 1995), although there is some suggestion that the frequency with which such strategies are used may affect proficiency (Bedell 1993 as cited in Ehrman et al. 1995). Research by Pintrich and De Groot (1990) links the use of metacognitive strategies to self-efficacy but not necessarily to academic success. Moreover, contrary to other findings in the literature they found that it was cognitive variables that were most closely “tied to actual performance” rather than metacognitive ones (p.37).

On the other hand, Wong and Chang (2001) have found positive results for the use of metacognitive strategies by university students do illustrate a general lack of awareness of their possible positive impact. To this end Karpicke, Butler and Roediger (2009) have investigated self-testing (i.e., a
recall/retrieval strategy) and found that “students lack the metacognitive awareness of the testing effect when they monitor their own learning” (p.477). This supports earlier concerns that “students sometimes predict that practising retrieval will produce no effect on retention (Karpicke and Roediger 2008) or that they will remember more in the long term if they repeatedly study material rather than test it (Karpicke, McCabe et al. 2006; Roediger and Karpicke 2006; Agarwal, Karpicke et al. 2008)” (cited in Karpicke, Butler et al. 2009). This may be something that learning support staff could explicitly integrate into their teaching.

Overall, as far as any strong correlation between strategy use and academic performance is concerned, the jury is very much ‘still out’. Some attribute this to the relatively rare attention given to “ensuring effective learning by explicitly teaching cognitive and metacognitive skills in a metacurricular way, that is teaching how to learn effectively along with the subject content” (Cornford 2004). Research also highlights the importance of metacognitive skills in the work-force. Therefore, assisting international students to ‘learn how to learn’ and to help them organise themselves to implement strategies that assist them in their learning seems worthwhile.

Affective variables

Overcoming anxiety and social isolation

Participants in our study were well aware of the increased anxiety and social isolation that international students experience and offered several strategies to overcome these hindrances to learning.

- Learning language is not hard, if you really give it a try. Use English as much as you can, don’t just keep it away and stay in your comfort zone, step out even a little, things will be so different. Remember no try no gain. A hint of learning english is from your daily life.

- one should always step out of one's comfort zone in order to challenge and improve oneself

- When i was the first day came to Oz, i planned that not to live with people who speak my home language. To look back, i found it is work :)

- Try not to hesitate. Talk with people. The feeling of wanting to communicate with people makes you speak in English more and fluently…Use it in everyday life whenever possible.

This success was not enjoyed by all students though:

- I always use the wrong grammar and tenses that will make me embarassing. I am a coward that i dont know how to communicate with the stranger and even all my housemates from America or Europe. I would like to learn english well but i dont know how to start with and from. Actually, the hardest thing for me is I dont know how to get friends. I am still alone in the university eating alone walking alone attend the class alone. It is really hard for me to get a new friend.

As MacIntyre (2007) explains:

[A] significant number of L2 learners around the world brace themselves to the resolve, they learn another language, and they choose to speak in that language. For such people, a state is reached in which L2 communication is approached willingly; but as James (1890) suggested, others seem destined to remain in the condition of wish and not will (p. 549).

Anxiety when learning a foreign language has attracted the attention of many researchers, although most studies have focused on the language learning classroom
experience itself. Horwitz, Horwitz and Cope (1986) noted that language anxiety is linked particularly to the most stressful situations for language students—listening and speaking and that “speaking in class is probably the most frequently cited concern of the anxious foreign language students seeking help at the LSC at the University of Texas” (p.126). Anxious students will quickly begin to miss classes and postpone assignments. They also complain of not being able to discriminate between sounds and structures in their first, second and third (or further) language. MacIntyre (2007) proposes three types of language anxiety: trait, situation-specific and state. For example, a student’s anxiety may actually be a personality trait; the result of a particular situation or task (situation-specific anxiety), or a more momentary stressful experience or panic attack (state anxiety) (p.565). In terms of identifying anxiety, Ehrman and Oxford (1995) report face-saving behaviours (e.g., joking), physical movement (e.g., tapping a pen or pencil), psychosomatic and avoidance behaviours (pp. 68-69). Although not commented on specifically, a number of interviewees in our study intimiated that feeling anxious about using English had led to feeling awkward and behaving in socially inappropriate ways.

MacIntyre (2007) considers the interaction between anxiety manifest as avoidance and motivation manifest as approach and proposes that the fundamental choice is whether a learner chooses to speak or not (p.567), encapsulated in the term “willingness to communicate” or WTC (after MacIntyre, Dornyei et al. 1998). MacIntyre points out that most studies of WTC have considered the inherent traits of the learner, such as personality traits and how these will impact on their WTC in the L2 (e.g., MacIntyre, Clement & Noels, 2007). Despite this, few researchers have considered the element of choice or volition. Although the term ‘willingness to communicate’ was not one used by our participants, a number did suggest that to enable ongoing English development students must be willing to ‘have a go’—to converse with others in English and not to fall back on speaking their home language with friends.

At the same time, however, expressions of anxiety were strongly evident in our qualitative data suggesting that many experience high levels of anxiety when using oral language (English) in class or socially. This in turn hinders successful social interaction and results in only the more outgoing, confident and proficient students being proactive in their social engagement. Others may jeopardise their success by preferring to read the material rather than attend lectures and generally not enhancing their oral English development through a lack of practice and use.

There was a strong awareness of the need to socialise in order to improve one’s language for social communication. This matches the importance of cultural understanding evident in the findings of the previous section. However, students did not always find this easy to do, although the effort according to these students makes it worthwhile:

- Try to be in the environment that forces you to speak English, of course it’s scary and you can be nervous but that’s the way to learn. There’s no point of being away from home, friends, culture and learn nothing. I’ve come a long way and I know it’s best to learn English in English speaking country as long as you keep trying, trying, trying and trying....

- It’s important to be immersed in a culture in order to learn the language of that culture.

Students showed themselves to be very aware of the need for social contact, even though it was hard for them to either manage the time or to develop the skills for socializing. Cultural isolation and loneliness are not unusual among international students and are widely reported in the literature (e.g., Volet and Ang 1998; Robertson, Line et al. 2000; Pritchard and Skinner 2002; Rosenthal, Russell et al. 2006; Sawir, Marginson et al. 2008). Even when able to make social contact, some find that the
relationships they develop with local students are unsatisfactory (Lee, Maldonado-Maldonado et al. 2006) because of incompatibilities of age or nationality and problems of language and communication (Sawir et al, 2008). For some students, over time this loneliness diminishes, but for others it becomes debilitating and results in lack of motivation and academic attrition (Brennan 1982).

Overcoming a fear of mistakes

Errors may cause loss of ‘face’, particularly with students from cultures where ‘face’ is a salient social phenomenon. Errors “draw attention to the difficulty of making positive social impressions when speaking a new language… [However] it is axiomatic that language learning cannot occur without errors” (Gregersen and Horwitz 2002 p. 562, after MacIntyre & Gardner, 1989). Language learners who are afraid of losing face through making mistakes will rarely begin a conversation, will withdraw from class activities and even avoid classes altogether. Expressions of anxiety were strongly evident in our qualitative data suggesting that many experience high levels of anxiety when using oral language (English) in class or socially.

Gregersen and Horowitz (2002) draw parallels between language anxiety and perfectionism. Many of the attributes of these two concepts are shared: for example, “[r]ather than demonstrating less-than-perfect language skills and exposing themselves to the possible negative reactions of others, perfectionist language learners would likely prefer to remain silent, waiting until they were certain of how to express their thoughts” (p.563). The outcome of perfectionism is often lack of progress, as noted by Brophy (1999): “[p]erfectionists show unsatisfactory achievement progress because they are more concerned about avoiding mistakes than about learning. They are inhibited about classroom participation and counterproductively compulsive in their work habits” (p.112). These behaviours will of course be recognised by many academics whose student cohorts include international students from non-English speaking backgrounds. Surprisingly, our participants were well aware of the fear of making mistakes and provided numerous strategies to overcome this fear through perseverance. In fact many saw errors as an opportunity to learn:

- I believe making mistakes are the best way not to make mistakes in the future.
- Being open-minded, enjoying the learning process though sometime it's a bit depressing and frustrating. But keep going, never give up, never avoiding to speak out, there definitely will be one day that you can speak excellent English.
- Don't be afraid to pronounce something, even if you not sure how to pronounce it correctly. It can be embarrassing when you pronounce it incorrectly, but its better to try and learn correctly than to not try and never learn.
- It doesn't matter how many mistakes we can have, what does it matter is that we try and try until we can do it. We need to be confident but for being confident we need first to fall many times. To learn English is like to ride a bike, we need to fall many times until we can do it, but once that we make it, it remains for always.
- They should be assured that making errors is alright as long as they are learning from them. It is not a very difficult task and it is easy to find other internationals that are also trying to master the language which they can work together with. Also, they have to put effort into speaking English rather than just sticking with their own languages.

Naturally, developing and maintaining one’s confidence while speaking English featured strongly in students’ responses:

- Be confident in speaking and then you can improve with the English skills. Shy to ask and lack of confident when talking or demonstrate your opinion will slow
down your learning process. try to communicate by English as much as possible while you stay in English speaking country as it pushes you to talk like one too.

- In learning English, especially English as a Foreign Language (EFL), we have to be brave to practice. Don't be shy and afraid of making mistakes. Just enjoy every process of the learning itself and you'll find yourself so comfortable in learning English.

Other students demonstrated even more confidence and suggested risk-taking by way of guessing from context, a strategy that was reflected as important in the qualitative data.

- Don't try to look up for new words every single time you meet new words; guess the meaning first according to the sentence then look up later.
- Don't think. Just Speak.
- In terms of day-to-day conversation, guessing or improvising can suffice to maintain the interaction, which in itself is a valuable aid to improving one’s English.

An unfortunate finding to come out of our qualitative data, however, was that our students are suffering derision for their attempts at speaking English:

- shouldn’t be afraid to make mistakes when speaking English. don't give a damn if there's some native speakers mock your English. they’re being childish. mistakes are humane.
- learning something in a second language isn't easy at all so local students also shouldn't make fun of international students' English pronunciation or intonation that they have. I think being confident in every situation is very important.

Fortunately this was not the experience of all students:

- I'm pretty happy with that way a majority of Australians handle with people who are non-english speaker, especially at the University, it helps me feel comfortable and willing to communicate with them.
- at the beginning, i wanted to join various activities with native speakers, but then, i found they were friendly rather than supportive.
- I noticed native English people are very patient and understanding, so if you will be wrong in something or say something wrong—they politely help you. Practice makes perfect.

Motivation

Participants in our study provided extensive feedback on the survey relating to their motivation to develop their English. Their motivators can be categorised as career opportunities, personal development, access to western culture and entertainment, self-expression, a love of languages, social inclusion and friendships, social status, migration, and globalization and travel. In Gardner’s (1985) terms, language learners may be instrumentally or integratively motivated—although it is acknowledged that this distinction has been the subject of much debate.

Instrumental or employment-oriented motivation, when reported by our student cohort, seemed to revolve around a perception of English as an international language of knowledge production, commerce and science.
I want to be a good architect with a good incoming project and design a massive & unique buildings, so English is a MUST and a first steps before i can reach into that stage.

I really wanna improve my english skills. I am studying nursing, when I am on clinical placement or on the work, if I am not good at english, can't talk, can't understand, you can image how hard its for me, another thing is its really dangerous for patients, because everything we do is relate to their lives.

English is the prime language in aviation so a good command on english is necessary.

Being able to appreciate and participate in Western culture, music and literature were also motivators, as was the attraction of being part of a global community:

- I love reading books and gaining knowledge. Most of the materials are written in English and therefore developing English gives me an advantage in selecting various types of books. I also like to listen to musics and English songs have more variety and more entertaining than songs in my own language.
- English is an universal language at least that is what I believe. I have been using it back home, in Australia and almost everywhere I go. That is why I believe improving English is a must.
- I believe it to be one of the most beautiful languages ever created by mankind. Seriously. Try reading any titles by Alexander Mc-Call Smith should you think otherwise.
- English allows us to communicate with people from different countries, not only Australian people. And I really enjoy talking especially with and knowing people from different cultures.

Quite a few students simply loved learning languages of any kind and/or had a strong desire to be able to express themselves in English:

- I love having a conversation and listening to native speakers as it is one of my goals to develop my pronunciation. I can communicate comfortably to majority of native speakers, even though I know that I can make sense with my accent however I would like to develop it as much as I could.
- I like language, because i believe being good at a language is the only way to know and fully understand the culture.
- Learning language is fun. I feel regret I couldn't learn more languages when I was young. Now it is difficult for me to learn another foreign language. Compared to other students, I have a good foundation of English and I am doing the TESOL program. I wish I can be professional in English language study and help more Chinese learn English better.

Establishing social relationships, self-expression, and personal development were also deemed to be motivators:

- I want be able to express my ideas and thoughts efficiently, and able to communicate with english speaking people the same as the people from my country.
- Simply being able to converse fluently in English will allow me to be more confident about being in a foreign country. As well, it will be difficult for me to communicate with other people (including store clerks, librarians, lecturers, etc.) if I do not understand them well. It's all about survival.
One of the reasons that I push myself hard to learn to speak better English is because I want to have more Australian friends.

I want to talk to people freely and express my feeling freely, and I like to be socialised with people and make more friends.

Making new friends with English speaking students motivates me to improve my English, but I find it hard to be close to them, or make jokes, or anything else that I do with friends from the same language background.

Several students attached considerable kudos and social prestige to being able to speak English (preferably ‘well’):

- **Being able to use English well is part of the mark of scholarship.**
- **To be ‘eloquent’ when speaking in English, which is very, very hard for me to achieve.**

Finally, English was often seen as a ‘passport’ to travel, giving students the ability to move easily between countries, to enjoy different cultures and to make new friends:

- **Well, the lingua pura of the world is English. So, I learn English to communicate with the people of the world, so that I could visit more places and get to know more people.**
- **It helps me to travel around the world and know other cultures as English is a world-wide language.**
- **I really like to travel around the world and once I get to a new country, English as a world-wide language help me a lot to understand the history, famous places I should go and also famous dishes I should try. So that the better my English is, the more I can enjoy.**

Motivation to learn has attracted considerable attention both in the literature on language learning and in learning more generally. Much research has investigated different types of motivation and its link to academic success or second language proficiency as well as its links to learning strategy use. “Learning strategies are techniques that students apply of their own free will to enhance the effectiveness of their learning; in this sense, strategy use, by definition, constitutes instances of motivated learning behavior” (Dornyei 2001). Clearly, if students are motivated to learn, they will find and use strategies to help them to do so. This was very apparent from the students we interviewed—most of whom were highly motivated and who also employed a range of strategies to assist them in their English language development.

In research on motivation, some types of motivation are deemed to be more effective than others in promoting strategy use and academic success. Ames (1992) found a correlation between positive performance and strategy use on the one hand and intrinsic orientation—or that “which focuses on learning and mastery, not grades or performance” (Vanderstoep, Pintrich et al. 1996)—on the other hand. A second type of motivation, ‘self-efficacy’ or confidence in one’s ability, has also been linked to enhanced academic performance and strategy use by Schunk (1991), and to academic success and low withdrawal rates (Lecompte, Kaufman et al. 1983). By contrast a pessimistic self-view has shown a significant negative relationship with first year GPAs (Peterson and Barrett 1987). Students’ perception of the value of a task has been linked to strategy use by Pintrich and De Groot (1990) and by Schiefele (1991), and to achievement by Wigfield and Eccles (1992) (cited in Vanderstoep et al. 1996).

Wolters (1998) has also investigated and developed the concepts of intrinsic and extrinsic motivation. “Intrinsic motivation is derived from factors that are inherent in task completion and can be achieved only by engaging in the cognitive operations that are a part of the task” (p.226). Wolters’ intrinsic regulation includes mastery, value, interest
and efficacy, and was positively associated with deep learning strategies (e.g., elaboration, critical thinking and metacognitive regulation), but the correlation with students’ grades, though positive, was slight. The construct self-efficacy (an intrinsic regulator) has shown a highly significant positive relationship with academic success and low withdrawal rates (Lecompte, Kaufman et al. 1983). By contrast a pessimistic self-view has shown a significant negative relationship with first year GPAs (Peterson & Barrett 1987).

Extrinsic motivation is generated by external rewards such as grades and praise (p.226). Ramsay, Barker and Jones (1999) focused on positive and negative critical incidents (external regulators) in international and local students’ first year of study and noted the motivational impact of study group experiences, and editorial support from the language support centre. It was also found that motivation was improved through positive relationships with staff members and students. Our qualitative data shows that students draw on both intrinsic and extrinsic motivators. A love of language and literature, the wish to express oneself in English, or to achieve the status of ‘being an English speaker’ in one’s home country might be categorised as intrinsic motivators. Prospects of future employment and travel might be considered external and instrumental motivators for English language growth.

Speaking and Listening

Many international students come from backgrounds of English language learning where the focus has been on traditional didactic language pedagogy using explicit grammar teaching and translation methods. Although this might develop grammatical knowledge and skills, it is to the detriment of speaking and listening skills and communicative competence. Many students expressed concern about their abilities to communicate orally and to understand lecturers and peers, particularly those with an Australian or non-L1 accent:

- Communication on the telephone is one of the crucial thing for international students to know, since understanding what the other person says over the phone is pretty hard. It requires a pretty good listening level and a speaking level in order to communicate properly on the phone.
- I am totally confused in my class. Do not know what the tutor said…not really have any help, still poor.
- I feel very Inconfident when it comes to speaking in english, as far as the basic Introduction is concerned it is ok, but i cant keep the conversation going the moment i am being asked what i am doing this weekend. My main Problem is in the listening. I Never understand the australian accent. They speak so fast and they have a short for Every word. As far as i am concerned, My main problem is understanding their Accent.

The weakness in conversational English among international students at Australian universities has been investigated by several scholars (e.g., Woodrow and Chapman 2002a; Sawir 2005; Fegan 2008; Zhang and Mi 2009). Sawir’s (2005) interviewees acknowledged their weakness in oral language and attributed it to learning English as a “scholarly skill” (p.572) rather than a “living language” (ibid), having few native English speaker models, and little opportunity to practise English outside the classroom. Once in Australia, Sawir’s participants saw the benefits of developing communicative competence but acknowledged that this also required cultural knowledge that was not readily available in their home countries.

Another student in our study reported that attending all classes and lectures was valuable for improving understanding of Australian English.
- I attend all lectures/tutorials or lab classes because of its importance and because I hear native English speakers speak English, it turn, helping me to hear how they pronounce certain words

Other advice provided by students stressed the importance of practice and perseverance.

- Please don’t forget that keep practicing to keep up with the standard of English no matter how fluency your English is because once you become lazy to use English, then it will be time you get backward.
- The more you use English the better user you become. You learn writing by writing, speaking by speaking and reading by reading. Unless you use English more in your day-to-day activities, you will not be able to cut yourself off your first language umbilical cord.

Zhang and Mi (2009) maintain that the listening difficulties experienced by international students when studying in English are “the direct consequences of having to learn the language in a foreign language environment in which both (authentic) input and opportunities of interaction in English are not readily available outside the classroom, and in most cases, even inside the classrooms” (p.13). More than half of Zhang and Mi’s Chinese informants had never been taught by a native speaker, had been taught English using Chinese as the language of instruction, and had no speaking class in their curriculum. They conclude that “it’d be indeed a miracle if a student has no problems in speaking and listening comprehension in English” (p.13).

Invariably, international students find difficulty with colloquial language, reduced and contracted forms, prosodic features such as intonation patterns and word stress and of course, accents. Such prosodic features are fundamental to developing one’s understanding of a second language:

“Prosodic features” of the English languages—stress, rhythm and intonation can also be very important for comprehension. As a ‘stress-timed language, English can be a terror for some ESL learners as “mouthfuls of syllables come spilling out between stress points (p.341) Also, intonation patterns are very significant not just for interpreting such straightforward elements as questions, statements and emphasis but more subtle messages like “sarcasm, endearment, insult, solicitation, praise, etc.” (p.341) (Huang 2004 p. 216, after Brown 1994).

**Improving Grammar**

Students in this study placed considerable emphasis on grammar. This is unsurprising as for many their previous English language learning experience would have focused more on grammar through didactic teaching methods than on opportunities to use the language spontaneously (Sawir 2005). It should not be surprising therefore that achieving correctness in grammar was important for them, as exemplified by the following response from the open-ended survey questions:

- Grammar skills must be emphasised and prioritise. Vocabulary comes later.
- If you don't have much chances to practise your speaking skills in your country, try your best to have a perfect grammar.

Nonetheless, the grammatical instruction received by these students would not necessarily prepare them for the level of formality of English required in academic writing. One student in particular reported being surprised that there was not just ‘one English’ but a range of Engishes from formal to informal. Such misperceptions can impede the development of English as students struggle to find the correct ‘style’ and ‘voice’ in their writing.
Thus the difficulty that students encounter in mastering appropriate academic style can be attributed to their experiences of traditional grammar teaching, which focuses “on grammatical forms while paying little attention to their discourse contexts, thus failing to address adequately when and why a grammatical form is used in a given context” (Liu and Jiang 2009). As a consequence students do not become accustomed to lexicogrammatical relationships (e.g., collocations) that are so prevalent in English and so rarely explained in dictionaries. This awareness is evidenced to some degree in the following response:

- *i will recommend that everyone should learn a good english to communicate well because english is an international language but the grammar should be used carefully otherwise the interpretation may be wrong what you want to speak.*

However, a number of students acknowledged that their level of English at the textual level was inadequate for their units of study:

- *Sometimes the level of English Level used a bit too high as it is more technical, hence more concentration is needed and it takes time for me to grasp everything taught.*
- *I am doing management course, they are expecting more professional english to handle......its too demand for my course as well.*
- *I chose some arts subjects as elective units, which is quite different from commerce, for they require more advanced English skill.*
- *Language demands in my course are relatively high since the amount of readings from journal articles is substantial.*
- *My arts course have many essay assignments that requires high level of writing and usage of expression that I find very difficult. Sometimes I have arguments and ideas that I cant express correctly due to my language limitation and prevent me to achieve higher marks.*

Our student respondents reported difficulties that are common among international students in Australia. The above quotes clearly demonstrate that students see their courses as demanding a high level of expertise in English that they may be unable to achieve. This "prescriptive approach sanctions the reproduction of accepted conventions without contestation… It presupposes that students behave, believe, value and act according to an idealised norm largely based on Western academic discourses" (Abu-Arab 2005). Students see the need to acculturate “to the norms of the majority …[and] to reinforce the norms’ correctness. This educational approach thus resonates with the poststructuralist notion of othering (Said 1978; Pennycook 1994; Ashcroft, Griffiths et al. 1998)” whereby students equate their difference with “wrongness” (Abu-Arab 2005 p. 23). To counter this some scholars propose a multi-literacies approach encompassing “students’ ability to negotiate multiple languages and multiple forms of English and their associated discourses” (Abu-Arab 2005 p. 27, (after Hunter and Morgan 2001)) and thereby maximising and refreshing the perspectives on a subject.

However, both students and lecturers may have this idealised norm in mind because of the demands of their (potential) workplace, where tolerance of difference is bound to be less apparent than in our universities. Employers of our graduates will of course be influenced by their own stakeholders, and particularly clients and consumers whose expectations of quality may not be matched by staff with poor communication skills. Therefore the prescriptive demands of grammatically correct English remain and students are well aware of this.
• If you don't have much chances to practise your speaking skills in your country, try your best to have a perfect grammar.

• I always use the wrong grammar and tenses that will make me embarassing.

Therefore, many universities attempt to up-skill students’ English literacy skills, whether through extra-curricular sessions or by embedding these skills within the unit content as a direct response to this need. Indeed, one of our staff interviewees describes at length the embedding of academic skills into her unit— that is the process in which she engaged in order to address the real needs of her many international students.

Students completing our survey offered a range of strategies that they had found useful in developing their English grammar and which demonstrate their concern with correctness. This included referring back to basic grammar books, doing the specific grammar tasks in these texts, reading in English, using correct grammar when chatting online, listening to ABC radio and even using TV as an instructional source:

• start everything by starting learn english by reading basic, standard english grammar book that’s what i did right after i first came here

• I do 2 grammar exercises per day. Read over and over the assignment that I do, ask someone to read it to check if they understand what did I say.

• Just read english books and focus on correct grammar use when chatting online…I use English most of the time, and mostly listen to English music and read English books when travelling…

• Listening ABC radio everyday during go to and came back from Uni.

• Most of the times, I learn through listening to native speakers (people AND TV) and try to remember the phrases/words/grammar/pronunciation they used, write them down and try to memorize and use them myself as often as possible.

• Watching documentary movies sometimes it is more easier understanding grammar and learning new vocabulary from that activity.

**Building Vocabulary**

Vocabulary knowledge can be expanded either incidentally (e.g., through reading, watching TV or movies, listening to radio, by socializing), or by deliberate strategies such as making lists and consulting dictionaries. There is conflicting evidence on how effective either incidental or deliberate vocabulary learning is (see Gu 2003; Laufer 2003). It has long been recognised that learning a word involves more than remembering the form and sound; it also includes the syntactic and pragmatic use of the word.

Much research in the 1990s focused on classifying vocabulary-learning strategies. Gu and Johnson’s (1996) second language vocabulary learning strategies included metacognitive, cognitive, memory and activation strategies. With respect to vocabulary building, Metacognitive strategies are used by learners who develop an enhanced understanding of what words they need to know to understand their reading. In contrast, cognitive strategies for vocabulary building include guessing, using dictionaries and note taking. For instance, learners can draw upon their existing knowledge of their L1 and L2 and on linguistic clues such as the position of the word in the sentences to guess meaning. Memory strategies are either rehearsed (lists and repetition) or encoded (associated with an image, sound or context). Encoded strategies also include analysing affixes. Activation strategies occur when learners actually use new words in different contexts, i.e., they create sentences using the word.

Schmitt (1997) also developed a taxonomy for vocabulary learning. He divided the strategies for learning new words in the following way: determination strategies such as
not using recourse to another person’s knowledge but trying to guess meaning from one’s existing knowledge or the context; and social strategies such as asking for help. To this he added strategies for re-encountered words: cognitive, or mechanical means such as flash cards, lists and notebooks; metacognitive, such as testing oneself and selecting more effective strategies given the result; memory, such as mnemonics using imagery etc; and social or group vocabulary learning.

Nation (2001) proposed a similar taxonomy made up of three components: planning—or deciding how and where to focus on a word; source—or getting information about the word; and processes—or learning a word from noticing a word that needs to be learnt, retrieving from existing knowledge, or generating and using it in a new context.

More recently, Subekti and Lawson (2007) used a taxonomy of vocabulary learning strategies (after Lawson and Hogben 1996) which consists of passive non-elaboration (dictionary, repeated pronunciation, writing word and definition, creating a word list, and highlighting); active non-elaboration (word formation analysis, part of speech, guessing, sentence analysis, reviewing); simple elaboration (sound similarity, context, meaning analysis, word linking, and L1 linking); and complex elaboration (paraphrase, linking sound and definitions, creating an image, using L1 links to remember, justified meaning). Subekti and Lawson’s postgraduate students used more non-elaboration than elaboration strategies, while passive non-elaboration was the most widely used of all strategy types in their reading. Therefore, although the students were active strategy users, they did not use complex strategies, with the result that they could recall words (in Word Recognition Tests) but not necessarily their meanings (in Meaning Recall Tests).

Another major distinction that is made between vocabulary learning strategies concerns incidental and intentional learning. In general incidental learning through reading and listening is deemed “not only possible but also plausible” (Gu, 2003 p. 5) at least for advanced learners as we would expect our participants to be. Nonetheless a combination of incidental and intentional (i.e., employing specific vocabulary learning strategies) learning is seen as more effective (Laufer and Hulstijn 2001; Gu 2003). This is particularly pertinent to the findings of the current study where we found that undertaking intentional language-learning strategies (such as compiling vocabulary lists) were not positively correlated with achievement, whereas a more general approach of gaining understanding was.

Laufer (2003) critiques a range of assumptions made about learning vocabulary in an L2. These include the assumption that a reader will notice a word that they don’t know, that the reader will attempt to guess the meaning of a new word from the context, that once guessed the reader will remember the word and its meaning, and that the likelihood of this happening will increase with exposure to the word. She then investigates the impact of reading on more productive word-focused learning tasks and demonstrates that the latter tasks result in more successful vocabulary retention. However, in the face of much contrary research supporting the impact of reading, she concludes that a combination of both reading and focused tasks will contribute to a “well-balanced second language course” (ibid p. 584). Such a balanced approach is something that we would recommend for students wishing to develop their English.

Considerable debate persists about what is required for successful vocabulary learning, for example the number of exposures to a word that are required for it to be ‘learned’ (e.g., Nation 1990; Meara 1997; Horst, Cobb et al. 1998). There is, however, some degree of consensus regarding the effect of other factors such as how salient the word is to the learner (Brown 1993; Nation and Hwang 1995; Laufer and Hadar 1997). Further to this is the impact of individual learning approaches—Sanaoui (1995) for example, identified two quite distinct approaches to vocabulary learning: i) systematic recording and reviewing of new words; and ii) little attention to independent learning,
minimal record of unknown words and a reliance on class instruction. Despite our own findings suggesting a more global approach to learning, in Saraiou’s study the former approach resulted in more successful retention of new vocabulary. This may reflect the difference between large scale self report surveys and tightly controlled laboratory studies.

In the qualitative data relating to strategies provided by students in our study, the importance of improving one’s vocabulary was given considerable focus, particularly the difficulty experienced with academic vocabulary, although students in general did not differentiate between general academic vocabulary and discipline specific terminology. The enormity of the task of gaining an adequate vocabulary for university study is described by Tseng, Dornyei and Schmitt (2006):

> Although it is not realistic for most foreign learners to fully reach the level of an educated native speaker, it is nevertheless essential for foreign learners to commit themselves to sustained vocabulary study in order to reach the vocabulary requirements for even daily conversation and the modest reading of authentic materials. Given English’s very large lexicon, acquiring a vocabulary large enough to cope is probably the major hurdle facing EFL learners (Nation and Meara 2002), and clearly good self-regulation would be an important asset in this major task (p. 86).

Students offered numerous strategies that they had found successful in improving their vocabulary and which matched the above classifications. In the following subsections suggestions from our participating students are provided to exemplify the type of strategies they found useful for vocabulary development.

Using a new word

A common strategy reported by the students was to create an opportunity to use the new word or phrase.

- Try to learn a new word from daily life, even I was shopping at coles, the more time I use and see the word at my daily life, the more easier for me to understand and apply the word in my writing or speaking.
- I imagine the same situation which i heard the word and i say the whole sentence myself.
- The best way i think is just to speak with the native speakers of English so that you can learn so many new words.
- Using the word while having conversation with native English.
- Asking people what it means and how you pronounce it, if it is a difficult word I try to pronounce it several times till I get it right.

These activation strategies (as they are called by Gu and Johnson (1996)), ranked relatively low in the beliefs of their adult Chinese learners of English. Gu and Johnson maintain that this is “not surprising given the extent to which such strategies demand the management of learning time and effort” (p.654). Nonetheless Gu (2003) considers that effective vocabulary strategies “should include strategies for “using” as well as “knowing” a word” (p. 3).

Keeping a list

Other students in our study kept a list in a notebook, a diary or used “Post-It” notes for learning new vocabulary.

- Writing dairy using the new words i learnt and fond of, especially the adjective words.
Use online memory notes book keep them.
Type it in the phone to save first and then look it in a dictionary.
Creating a word glossary for a particular subject area.
I have a card system in where I write the key words and I like to make mental maps using those key words. I write the mental maps in my cards as well as the keywords with a short explanation.
It was really effective when I want to remember something, I have to repeat something again and again... so I kept my little notebook and look over time and remember some words, it was really effective. Especially when I reading another article, the word will appear I will remember it.... sometimes I still can’t remember all the new word, I can’t understand all the paragraph, but I have more confidence to read and to keep my ambitions to keep reading and fighting with the difficulty.

Similar to the results of our study showing a negative relationship between list making and academic achievement, Gu and Johnson’s findings also show that the “visual repetition of new words was the strongest negative predictor of both vocabulary size and general proficiency” (1996, p.668). In fact it was their weakest group of learners who “believed in memorization and placed the greatest emphasis on visual repetition of word lists” (p.668). Moreover, Carter (1987) questions the value of too much focus on learning discrete items as opposed to experiencing vocabulary in natural discourse. Gu (2003) advocates the need for more research on the impact of vocabulary note-taking in booklets, on cards, etc. He cites a study by Ahmed (1989) where note taking strategies did not distinguish successful vocabulary learners from the unsuccessful learners who tended to ignore unknown words. As noted such results are reflected in our own correlational results, highlighting once more the need for students to take a ‘balanced approach’ to vocabulary learning.

Dictionaries were also used, but interestingly for our participants this often meant investigating the examples of the use of the word in sentences. This suggests a more strategic use of dictionary resources:

- Check it on online dictionary about the meaning and its usage.
- Look it up at the dictionary and read the example sentence of the word.
- Look up for dictionary to check the explanation and sample sentence and related words.
- Look for more information about the word in wikipedia.
- Alternatively, the dictionary may be a secondary resource ‘if all else fails’:
- I would circle them then continue with the story first, if i still don't understand the meaning of the word, I would check the dictionary.

Dictionary use has been the focus of several studies which have found no significant difference between dictionary use by students with high and low inferencing ability (Hulstijn 1993) and post-test scores showed no difference between those who had used a dictionary repeatedly and those who had not. Luppescu and Day (1993) however, found that students who used bilingual dictionaries had higher post-test vocabulary scores, as did Gu and Johnson (1996). Bensoussan, Sim, and Weiss (1984) also question the benefit of dictionary use for reading comprehension. Again this shows synergies with our own research where the global construct of ‘understanding’ was one of the few items to correlate significantly.
In contrast, Knight (1994) found that dictionary use can both aid comprehension and increase vocabulary acquisition. Dictionaries vary and many international students now rely on electronic bilingual dictionaries, which although quick and convenient, rarely provide accessible contextual information on the use of the word. Therefore we would suggest that students exercise some caution when using them—and certainly we would recommend that they try to use alternative approaches at least some of the time rather than developing a dependency on such technological assistance. Added to this is a need to develop an understanding of the resourcefulness of dictionaries. For example, almost half of Lemmens’ (1996) translation students were unaware of the grammatical information provided in their bilingual dictionaries. However, even with the added advantages of learners’ dictionaries which are acknowledged as superior to electronic dictionaries (Miller 2005), international students still probably prefer to use their easily portable electronic devices.

Inferencing from context

Students also drew on the context or situation where the word/phrase was used to understand its meaning:

- *I imagine the situation which I heard the word and I say the whole sentence myself.*
- *Understand it from the context I heard it.*
- *Try to guess the meaning according to the sentence that it belongs, then keep reading or listening, then it will appear more meaningful to you. Or try to ask your friend to explain by English.*
- *Gloss in text and return later.*

Context-related vocabulary learning strategies do require some basic lexical understanding to build upon and we would expect this of students who have already entered an Australian university. Laufer (1997) proposes a threshold vocabulary of 3000 word families before higher level inferencing processes can be used successfully. Without this threshold, learners are hindered by an inability to gain knowledge from clues in the text and cannot develop a familiarity with the text schema. However, Pressley, Levin, and Miller (1982) maintain that inferencing from context is only the first step in learning from context and studies vary in their support for and against the success of inferencing in vocabulary expansion. Gu and Johnson (1996 p. 653) in their study of Chinese students’ beliefs regarding vocabulary expansion, found that most students believed vocabulary should be explicitly learned and then put to use. Obviously those students in our study who ‘made lists of new words’ also hold a similar belief, despite our correlational results suggesting that the contribution of such strategies is not strong. The next most popular belief in Gu and Johnson’s study was that vocabulary should be acquired in context.

Inferencing has generally been considered “a desirable strategy because it involves a deeper process that is likely to contribute to better comprehension of the text as a whole and may result in some learning of the lexical item that would not otherwise occur” (Read 2000). It certainly requires that the learner understand or infer from the context in which the vocabulary is used. Others such as Bialystok (1981) have found that inferencing is unrelated to achievement at any level, or that students may in fact guess incorrectly (Pressley, Levin et al. 1982; Kelly 1990), and that guessing does not lead to the long-term retention of a vocabulary item. Haastrup’s (1991) findings from her study of lexical inferencing support this view. In fact, performance in her study was facilitated when participants drew on several levels of inference. Again this reflects the ‘guessing from the context’ strategy that was reportedly used by some of our own participants.
Memory and repetition

Memory, repetition and spelling aloud were also reported as strategies used by the participants in this study.

- **Learning from movies that I like, and watch them over and over again.**
- **Spelling it out loud.**

Nonetheless, this type of learning behaviour is not well supported in the literature: “Pure retention of decontextualised words without a threshold level of L2 skill offers limited value no matter what “deep” processing strategies learners use to achieve this purpose. Learners should use memory strategies that aim for retaining word-meaning pairs with caution, if at all, and should complement them with other fully contextualised strategies” (Gu & Johnson, 1999 p. 669). Issues affecting successful acquisition of vocabulary this way include the length of word lists and the number of repetitions required for retention of a word in long-term memory and individuals’ memory capacity.

Other strategies suggested by the participants included mind-maps, images, mnemonics, searching for synonyms, or looking at the word structure and its relationship to derivatives:

- **Using that word after making mnemonics that is very easy to memorize that word.**
- **Using a mindmap program.**
- **Understand meanings of it from the root and then arrange it in the group by thinking.**
- **Try to remember images.**
- **Find a word with similar meaning that I am familiar and associate both word together.**
- **When I read an academic article I think I can read it faster than I read a novel…Because when I read my academic article, I just keep the main points and most of the words I can understand because they have their own pattern and they use some words that are really similar and they are quite long and you can just remember the word root and they will change the form of the words. Maybe you can’t spell it but you can understand what they are talking about.**

Mnemonic devices have been described as more desirable than rote memorisation given the greater attention and focus required in setting up the method to retain the word (Fan 2003). Others consider that mnemonics require too much effort (Sternberg 1987). Ellis (1997) notes that not all words are suitable for mnemonics and that mnemonic strategies do not help with spelling or pronunciation. Gu (2003) criticises the one-to-one relationship upon which mnemonics are developed and thus failing to accommodate multiple meanings, contexts and nuances.

Focusing on the form or structure of a word has been deemed useful, particularly with regard to affixes and their meaning (Nation 1990; Nation 2001) providing the learner has the advantage of knowing Greco-Latin roots. For students from Asian and South-east Asian language backgrounds however, this a further task to be mastered in learning English. Even so, Gu and Johnson’s (1996) participants thought that attention should be paid to word structure (e.g., affixation).

Alternatively students might organise words based on their meaning with semantic maps, networks, etc. Such strategy instruction assumes that the L2 lexicon will be cognitively organised in the same way that we assume it would be for a native-speaker (Nation 1990). We have no evidence of our participants using semantic maps.
Learning from reading

Reading was noted as an activity that enhanced the development of vocabulary:

- *I improved my English just because of learning new words specially from Newspapers and the GRE word list.*
- *Reading works to building up my vocab.*

The impact of reading on vocabulary acquisition has attracted considerable research attention. For example early research by Day, Omura, and Hiramatsi (1991) found a positive result in vocabulary tests following sustained silent reading for entertainment. This is an approach that could be incorporated into normal study practices by international students.

The utility of reading for vocabulary development is that it creates an incidental learning situation where any number or type of unfamiliar words might be encountered. Readers have the choice of consulting a dictionary (either immediately or highlighting to come back later to check meaning), inferring meaning from context or prior L1 or L2 learning, or ignoring the new word. These are called lexical processing strategies (Fraser 1999). Inferring meaning was used marginally more by Fraser’s francophone university students, but only 52% of these instances resulted in full comprehension, whereas 78% of dictionary consultations resulted in full comprehension. Research suggests however that learners usually ignore an unknown word and only infer when necessary (Bensoussan, Sim et al. 1984; Paribakht and Wesche 1997).

Our cohort of international students reported thinking about the types of words that they would need for their study and assignment work. Some indicated that they developed lists of useful words, particularly when studying for exams. Others said that they highlighted or noted difficult or unusual words and when possible asked their tutors about these. Very few students reported translating a new word or phrase back into their own language as a strategy they would use, even though there is research evidence that L1 or L2 glosses made somewhere near the relevant text can help readers to learn, retain and review new words and assist their comprehension (see for example (Hulstijn, Hollander et al. 1996; Cheng and Good 2009).

Discipline specific vocabulary

Naturally discipline specific terminology will constitute a large proportion of the vocabulary that university students from all backgrounds will encounter. Several students noted difficulties with discipline terminology:

- *I am taking a law class and the language is complicated even for my native english-speaking classmates. It takes me long time to understand the meaning of what is said in the books.*
- *I need to understand mathematical terminology in English. Since I have studied mathematics only in my first language, it takes time to realise what my supervisor/other students are talking about even when I am familiar with the concept.*
- *In accounting, mostly people will think that there is a less exposure to English but still, we need a strong knowledge in the usage of the language to pass the course as the media in Australia is English itself.*
- *In science there are some words that are different and i couldnt even translate them into my own language which made it a bit harder to understand.*
It is very clear that the participants in our study understood the need to master the vocabulary of the English language and that this can be a daunting task. Therefore our participants rightly focused on developing their lexis seeing this as essential for success at university. The difficulty confronting our international students is detailed in the following quote:

Acquiring sufficient lexis is a key aspect for developing language skills. Knowing a sufficient number of words is necessary for both daily oral communication and various types of reading (Nation 1990; Nation and Waring 1997; Nation 2001). For instance, around 3,000 spoken word families are required to cover about 96 per cent of the words used in daily conversation (Adolphs and Schmitt 2003). Similarly, 3,000 written word families are required for reading authentic texts (Laufer 1997). Furthermore, to match the lexicon of a native university graduate, a vocabulary size approaching 20,000 word families is needed (Goulden, Nation et al. 1990). Carter (1998) remarks that non-native speakers need to learn 1,000 word families per year to catch up with the level of an educated native speaker (Tseng, Dornyei et al. 2006).

**Idiomatic language**

According to our participants one of the most difficult barriers to vocabulary acquisition was the prevalence of Australian idiomatic and colloquial language. Most importantly, and as supported by the quantitative findings of the previous section, was the recognition that understanding local culture contributes markedly to an understanding of the language:

- *English is not the same in all English-speaking countries, so international students need to know which words can be used in some specific countries, otherwise it will raise some problem, e.g, offend people which they don't mean to.*

- *In line with the expression, "When in Rome, do as the Romans do", I think it is important that international students learn to do things and adapt to how the Australians works.*

- *To understand your own culture is actually as important as you try to understand Australian culture when you study English as your second language. If you do not understand what kind of culture you came from, you'll not understand what's the best way for you to study English most efficiently. The better you get with second language, the more you come to appreciate your own culture.*

Although idiomatic speech and local colloquialisms caused considerable difficulty for our participants, Robertson, Line, Jones and Thomas (2000) report evidence of “a willingness to accommodate the problem of understanding ‘Aussie’ English” (p.95). In recognizing this difficulty, many of our students were aware of the strong need for cultural understanding when developing their English in Australia. Robertson et al. also suggest that international students need some understanding of culturally based body language, which can provide important non-verbal cues in an academic lecture. Mulligan and Kirkpatrick (2000), for instance, found in their research on comprehension in lectures in an Australian university that students from non-English speaking backgrounds can have particular difficulty in identifying non-verbal signals of changes in topic or emphasis in a lecture.

A study by Huang (2004) further highlights some of the difficulties international students face in this area. He asked Chinese students of their experiences with their
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Lecturers' use of colloquial and slang expressions and found that some 50% reported that their lecturers' use of colloquial and slang expressions hindered their comprehension of lectures. ANOVA analysis showed significant differences by level of studies and discipline area, with undergraduate students reporting more problems than graduate students, and arts students having greater difficulty than science students (which may be due to the "text intensity" of arts lectures). These results resonant strongly with the comments we received in response to our open-ended questions and during our interviews.

Colloquial language has been recognised as a barrier to learning through the medium of English by Brown (1994, cited by Huang 2004):

Colloquial language is a special challenge. Brown points out that ESL learners who have been exposed to standard written English and "textbook" language sometimes find it surprising and difficult to deal with colloquial language, because the speakers often use many colloquial and slang expressions such as "Don't be a slacker;" "Don't let homework get above your head;" "to be on the ball;" "to stay on top of it;" etc. It is a real challenge for ESL learners to be reasonably well acquainted with the words and idioms and phrases of colloquial language.

Colloquial and idiomatic language is an important component of Australian English and Australian culture and this importance is recognised by students—it was certainly a sentiment expressed often by our participants. However, as Rastall (2004) suggests "we may be overestimating the factor of cultural background. Students are generally quick to adapt" (cited in Kingston and Forland 2008). As one student we interviewed explained, many inexpensive books on Australian expressions, not to mention websites, can be used to improve one's understanding of Australian idiomatic speech.

**Vocabulary for Information Literacy**

Tertiary literacy has now expanded its reference to not only include reading, writing, listening and speaking skills, but also literacy skills relating to information technology. Such skills and understanding are affected by English language skills. "English is a foundational problem. It permeates all aspects of an international student's quest for information literacy, from taking notes in the classroom, to asking directions in the library, to the kinds of database searches that are done, to the papers that are written" (Badke 2002). This was also evident in our data:

- *i feel shy and not nature in the way to find an opportunity for speaking english such as asking people for helping to find the street or even library staffs.*

Specific difficulties are highlighted by Zoe and DiMartino (2000), who found that non-native speakers of English had the most difficulties in choosing and manipulating the appropriate terminology to generate useful results from a database. "With the lack of controlled vocabulary and the need for sophisticated precision search techniques which are language based, such as proximity connectors and use of synonyms, those students for whom English is not the native language may be at a disadvantage" (p.302). These claims are also supported by Mu (2007) who suggests that students' poor vocabulary knowledge, particularly synonymy, is a hindrance to successful database searching, for example, "international students still find database searching to be very complicated, as it is found that the use of synonyms, a necessity in keyword searching, is a difficult skill to master, especially for students with limited English vocabulary" (p.576).

Lecturers and course developers invariably depend on students already having adequate information literacy skills to complete their assignments. However, as this research suggests, information literacy is something that must also be mastered with special instruction at library workshops, and most importantly through time and practice. Research conducted by Baron and Strout-Dapaz (2001) across 300
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universities in the US found that students do not necessarily transfer knowledge from
their workshops to their day-to-day experience with library materials and faculties.
Participating library staff identified three major challenges for international students,
“language and communication problems, adjusting to a new educational and library
system, and general cultural adjustments” (p.318). The authors provide a number of
recommendations for libraries to assist international students in improving their
familiarity with libraries and their services. Similarly, Mu (2007) suggests a more
proactive approach by library staff for international students. Mu notes that although
“some of the academic libraries in Asia do have a reference service, most students do
not need or use it as their exams and assignments are textbook-based. Accordingly,
most students from Asia are not fully aware of the readily available professional
assistance on information-related issues; they tend to view the library as a place to
study and librarians as bookkeepers rather than information providers” (p.573).

Nonetheless, some students in our study did demonstrate library and/or information
technology strategies to overcome their difficulties with subject content, such as
seeking out other explanations of a theory to understand it better—strategies which
necessarily involve the use of information technology:

- If I can’t understand the theory, I go to library and look at other books because the
  theory is same but the way that the writer presented is different. Sometimes it
gives me better understanding of my study.

- I thoroughly read my textbooks and lecture notes and where some points I
  needed more to understand well, I search up the websites in different ways, so I
could look at things from different views, other than what only lecturers give us.

Conclusion

Our study shows that students employ a considerable range of academic and language
learning strategies. Of the academic learning strategies we have noted evidence of
social strategies, such as creating or joining study groups and participating in tutorial
discussions. However this positive feedback was tempered by many references to the
debilitating effects of shyness, fear of ridicule, and a sense of intolerance, which
suggests that our universities are not always offering comfortable and secure learning
environments.

Numerous cognitive learning strategies were offered by our participants, ranging from
simply making lists and learning by rote, to reading as widely as possible and preparing
for classes. Memorisation was both supported and rejected in the feedback from our
students suggesting that the range of learning strategies used by international students
is varied.

The metacognitive strategies of organisation, planning, and self-evaluation were less
frequent in our qualitative data which suggests a need to promote these strategies
within university support services and within faculties.

Advice both from the many international students who completed our survey, and from
the decades of research on language learning emphasises the importance of affective
variables. Confidence is important. Learners need to overcome any fear of making
mistakes, that is, to keep trying and taking risks, and to expect that they will need a
period of adjustment to become comfortable with a new language and a new learning
environment. On-going motivation and positive thinking are also fundamental, as
learning another language is a life-changing experience.

As the old adage goes: Practice makes Perfect, so English should be used often and
widely. For international students this will mean moving out of their comfort zones—
even one’s L1 living arrangements—in order to think, speak and live in English. Social
immersion in an English-speaking environment is important, whether created at home, at university, at work or in the community. Many students noted that their English language development has involved understanding the cultural conventions and linguistic subtleties of the host country, many of which can only be learnt by communicating with native speakers.

Learning a language is an intellectual challenge that can be enjoyed, and certainly is by several of our participants who expressed a “love of language”. Finding the best learning strategy, the one that most suits your learning style and the academic task at hand, is a further challenge that may only come with experimentation.

6. Recommendations

Consistent with many studies that have investigated links between learning behaviours, attitudes and academic success, we found only a few significant relationships, and those we did find were weak at best. As many others before us have found, academic success is linked to a plethora of variables, of which learning strategy use and affective variables represent just a few. Nonetheless, we are able to suggest some factors that might be considered to enhance international students’ experience and success at Australian universities.

At the same time we acknowledge that most universities are already responding to their international students’ needs in ways that support our findings. Therefore for many teaching and support staff at universities the recommendations proposed here may be nothing new. Nonetheless we hope that, as a result of this study, universities are able to refine their support for international students to address what may be a new focus or direction.

1. The findings from our study strongly suggest the need for learning environments to be supportive of students.

   **Recommendation 1:** For this to happen we recommend that both teaching and support staff work together to cater for the needs and interests of all students through being cognizant of the students’ backgrounds, opportunities, skills and understandings and by providing appropriate teaching and learning resources.

2. Related to Recommendation 1 is our finding that a key component of academic success is the need to develop deep level understanding.

   **Recommendation 2:** Therefore we recommend that teaching and support staff develop and provide learning opportunities and provide adequate and appropriate resources (in a timely manner) so that this can be achieved.

3. The value of the daily use of English by international students cannot be overestimated. However, students need opportunities for this to occur. Our study shows that many students are so overwhelmed with their academic workload that they are unable to take on this additional, yet effective, learning opportunity. Moreover, many courses do not allow time for students to integrate. Since the tutorial classroom is the environment that lends itself most to interaction between students, the importance of creating a relaxing and secure environment is fundamental. This means that non-native speakers’ contributions are not dismissed or ridiculed by other students. Codes of conduct or “ground rules” can be set to ensure that all students’ contributions are valued.

   **Recommendation 3:** The project team therefore recommends that tutorial classes are used to enhance communication between students, over and above the traditional format of discussing subject content. Numerous ice-breaking games and
interaction tasks are available online which can be remodelled to enhance content learning and communication and which can help interlocutors to relax and develop friendships. Some examples might be activities where students match terminology and definitions, activities where student groups recreate, in their own words, topic sentences or a new title from a reading, or where students work together on concept maps thereby developing their language as they negotiate and contribute to the creation of a map.

4. Following from Recommendation 3 is the value of social support groups and functions for international students. At the university level, it is important that funding continues for these activities. At the faculty, school/department, or course/unit level it is important that students are encouraged to join such groups where they can overcome anxiety with regard to speaking.

**Recommendation 4**: We recommend therefore that lecturers and tutors are informed of social activities on their campuses and encourage their international students to attend. Social activities involving small unit enrolments are also an option. A list of clubs and societies and recommendations for membership can be part of the unit guide. Social activities can be advertised on the unit or course website and students can be advised on the value of social learning strategies.

5. University support services already provide numerous orientation and study programs which are often poorly attended, particularly as the semester progresses. Most universities have responded to this with attempts to ‘embed’ academic support, however often these result in nothing more that ‘token’ responses to university policy allowing support staff ten minutes of a lecture to advise students.

**Recommendation 5**: We recommend that unit coordinators make a serious attempt at embedding academic support into their units. This can be done by working closely with academic skills development staff and with teaching and learning development staff at the curriculum development stage.

6. Following from recommendation 5 is the need for students to understand about learning, what strategies suit them, what strategies are available, and what strategies other students are using. This is a further role for learning advisors, but also one that can be taken on board by academic staff.

**Recommendation 6**: The project team recommends that students’ meta-learning knowledge (or metacognitive strategies) be developed. This can be done with information on and/or links to learning strategy advice on unit or course websites and in unit guides. It can also be the subject of discussion in an early tutorial. The CD ROM which is produced as a resource from this project can also be used to develop students’ understanding of “how to learn”.

7. Preparation before classes/lectures and attendance at classes/lectures was linked to academic success in our study. Also significant was good organisation with regard to getting assignments done early. There is clearly a need for staff to carefully construct their material so that students can adequately prepare before class, and that they construct their classes in such a way that students are motivated and understand the need to attend.

**Recommendation 7**: We recommend that academic staff provide sufficient guidelines so that students can prepare for classes and also that their resources are constructed in such a way that students’ time management skills can be developed. For example, with online learning management systems, students can demonstrate that they have already begun preparation for an assignment by submitting an abstract or plan. Reminders can be generated for those students who have not achieved these interim goals and support can be recommended and/or offered.
8. Our research found that making connections with prior learning is important for academic success.

**Recommendation 8:** We recommend that academic staff (continue to) provide explicit ways for international students to connect the new knowledge of their units with their prior experiences.

9. International students in our study recognised the importance of learning about Australian culture in order to understand and operate in Australian English and society. At the same time, many would like to have their own cultural experience and expertise acknowledged.

**Recommendation 9:** We suggest that internationalisation of the curriculum involves a two-way process whereby academics explicitly demonstrate and compare the cultural components of their discipline areas on a local and on a global scale.

10. This study highlighted the importance of affective variables in student learning. Several beliefs showed some small relationship with academic success, the importance of cultural understanding for improved English, and the belief that one’s speaking should not be hindered by making mistakes.

**Recommendation 10:** We recommend that academic and support staff develop a greater awareness of the impact of affective variables on both language and academic learning and consider that these are not only the purview of the various counseling services. Numerous stresses confront international students and these can result in loss of motivation and a fall in academic achievement. We believe that the responsibility for maintaining students’ motivation lies very much with the university as a whole.

11. In our qualitative findings students expressed concern about their listening abilities, particularly in the face of the range of accents they meet in an Australian higher education context. In terms of lecturing, it is generally felt that it is the obligation of the lecturer to make him/herself understood. This responsibility can be enhanced through the use of resources such as lecture notes, recorded/videoed lectures, podcasts and online powerpoints, and visuals.

**Recommendation 11:** The project team recommends that lecturers take steps to ensure that students understand the content of the lectures. This can be done by speaking clearly and at a pace whereby notes can be taken, avoiding colloquial speech, explaining analogies and metaphoric expressions, providing objectives and alerting students to each objective as it is addressed, and using directive discourse markers. It is also beneficial to provide rest points at approximately 20 minute intervals.

12. An important finding in our study was a significant relationship (although weak) between academic achievement and receiving marks for good English in assignments. Obviously good English expression will enhance any grading of a written assignment, but this result suggests that if students’ awareness of the value of their English is judged, then better results will occur.

**Recommendation 12:** Our team therefore recommends that assessments include marks for English. We are aware that many academic staff are reluctant to judge the quality of English in their students’ assignment, feeling untrained to do so. However, the combination of clear organisation, affective cohesion and coherent argumentation will render a better mark regardless of the assessor’s skills and it seems that knowing this has a relationship with students’ efforts.

13. Our results support several other studies - highlighting the importance of adequate reading skills for academic success. Because reading at university is not an activity which is observed, in contrast to the writing that is generated from it, there is a
tendency to leave students to their own devices. Moreover, when the importance of reading is stressed, it invariably carries the message of reading more, and more widely, regardless of students' skill levels. The relationship between reading and subsequent writing is important. Without adequate reading skill development we create in students an instant dependence on the very words of a written text – we set them up to plagiarise.

**Recommendation 13:** The project team therefore recommends that additional focus be placed on developing international students' reading skills. For example, the deconstruction or analysis of a prescribed reading can be the topic of a specific workshop/tutorial, reading groups can be set up, and annotations can be added to a text, as some simple examples.

14. Our research highlights the advantages of developing students' reading to the point where they have the ability and confidence to infer meaning from the context. Many students are arriving at university with an ongoing reliance on dictionary use which makes reading and writing time-consuming and often inexact. The enhancement of reading skills as recommended in No 13 above, will go some way to breaking this dependence.

**Recommendation 14:** In order to enhance students' inferencing skills, it is recommended that students are introduce to terminology in context rather than simple word lists/glossaries, although lists of content terminology should be readily available as part of the course materials. Unit guides can also recommend the use of Learner's Dictionaries and staff can ensure that these are available for purchase in university bookshops.

15. Following from Recommendation 14 above, is the importance of information literacy. Academic staff frequently expect students to master the information technology of a modern university library early in their studies. Library staff provide valuable support by way of orientation tours and classes. Somewhere in between these two vectors is the students' need to develop an adequate vocabulary in order to successfully utilise the electronic facilities available to them.

**Recommendation 15:** We recommend that both academic staff and academic support staff explicitly teach the concepts of 'keywords', 'searches', 'databases', 'electronic journals', 'electronic resources' and so forth. Additionally, we recommend that unit guides provide keywords and nominated databases with instructions for access along with assignment task instructions.

16. Numerous students reported difficulties with spoken language, in particular their concern at having inadequate oral communicative skills to make friends or to contribute to tutorial discussions. Given universities' promotion of dialogic learning environments wherein critical discussion is promoted, it is of some concern that many international students cannot benefit from this learning. Several participants explained that their prior language learning had been heavily biased towards traditional grammatical instruction and translation providing little or no opportunities to converse in English.

**Recommendation 16:** It is suggested that universities reconsider the weighting of their entry requirements (e.g., IELTS, TOEFL, etc) in favour of higher level spoken English requirements. This may go some way to enhancing international students' cultural and social adjustment and increase their involvement in the academic communities of their disciplines.
## 7. Project Objectives and Outcomes

### Achievement of project deliverables

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<tr>
<th>Proposed Deliverable</th>
<th>Outcome</th>
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| Provision of online resources to support international students’ ongoing English language development | **Achieved** – The ELG website ([http://www.elg.edu.au/](http://www.elg.edu.au/)) was created early in the project to disseminate information about the study, to provide students with access to online language learning resources, tips and support, and to attract students to complete the survey. In addition to language learning strategies provided on the resources page, the survey itself contained strategy lists that students were able to download to take away. The website operated during administration of the ELG survey and remained available throughout the project period, although usage fell off considerably after the survey period ended.  
**Ongoing** - The site will be **relaunched** as containing the content of the CD ROM at all participating universities upon approval of the report and materials by ALTC for release. |
| Large scale national data collection that draws on students’ own learning experiences, matched with grade point averages for evidence of correlations with academic success | **Achieved** – The survey data collection (online via the ELG website) was completed 30 April 2009 with a total of 798 international students completing the survey (Monash 189; Macquarie 156; Melbourne 154; ECU 161; Deakin 138). Survey data provided extensive information on the strategies the students used for both their academic and language development. Statistical analysis of quantitative data and theme analysis of qualitative data helped to triangulate the findings and strengthened the development of deliverables. Permission for access to GPAs was obtained from a majority of respondents and from all participating universities.  
Planned discussion board responses were virtually non-existent, so this element of the data collection process was not successful. We also had difficulty in recruiting the proposed number of students for interviews (11 in total were conducted), however we certainly had enough video-taped material for both the ELG website and CD ROM. Furthermore, the depth and quality of qualitative responses students provided in the survey more than compensated for our lack of success with the discussion board and interviews. |
| **Student CD ROM – Learning Strategies for English Language Growth and Academic Success** | **Achieved** – The completed CD ROM includes video clips from interviews with successful students; information about the affective domain of learning (i.e., beliefs, motivation and strategy use); information on the importance of accessing the local socio-cultural context; links to online resources; ‘tips’ or good strategies for developing language and learning skills; and advice on strategies and behaviour that may limit language development and academic success. See below this table for more detailed summary of the contents of the Student Resource/CD ROM.

**Added feature:** The CD ROM content will continue to be available on the ELG website for 12 months after submission of the final report to ALTC. We also expect that all participating universities will choose to host the modules on relevant university web pages. |
|---|---|
| **Staff resource – publication**
Assisting Learning Strategy Development | **Achieved** - The staff resource is located on the ELG website and includes:
- the literature review as included in the main report;
- an executive summary of the project and its findings;
- a teaching resource providing suggestions for student support and teaching strategies to enhance learning by NESB students, all informed by the project findings. |
| **Major Project Report** | **Achieved** – The project report is readily available via the CD ROM and from the ELG & ALTC websites and includes the following as outlined in the original proposal:
- literature review;
- research findings;
- strategies for successful language learning and academic achievement informed by the research findings and literature;
- recommendations for universities and teaching staff, informed by the project findings (e.g., suggestions for pastoral care and support, recommendations for teaching and enhanced learning). |
| **Seminars and workshops at participating universities** | **Delayed** – Due to delays in completing the CD ROM and website resources, we have not been able to launch the report and resources during the term of the project. All team members of participating universities have planned seminars and/or workshops at their home institutions for Semester 2, 2010 (see Dissemination Strategies below). |
The Student Resource CD ROM

The student resource from this project is a CD ROM\(^2\) (also currently available online \[www.elq.edu.au/\]) which provides advice to students regarding their ongoing English Language Growth.

The resource contains five separate modules reflecting the findings of our project:

- **Module 1:** *Staying Motivated about your English.* Module 1 introduces students to the importance of one’s motivation and beliefs and how these factors can have an impact on one’s learning.
- **Module 2:** *Using your English.* Module 2 introduces students to opportunities where they might use their English more and how to cope in these situations. This module also alerts users to consider how much they are actually using English in their day-to-day lives and how this might be increased.
- **Module 3:** *Studying in English.* This module covers strategies of value for academic learning, such as, social strategies (learning with groups, friends, etc), cognitive strategies (actual ways to expand knowledge) and metacognitive strategies (ways to organise one’s learning).
- **Module 4:** *What your lecturers expect of you.* In Module 5 advice is provided about the expectations of lecturers. This information focuses in particular on the value of time commitment and exposure to the discipline area through extended reading.
- **Module 5:** *Strategies for you to try.* Module 5 is the longest module and includes strategies for improving the four language skills (speaking, listening, reading and writing). This module also includes a section on developing one’s vocabulary for better discipline understanding and information literacy.

With the exception of Module 4, checklists of strategies can be downloaded as pdf files. These checklists give students the opportunity to identify and record those strategies that they are already using, and those that they might like to try out to improve their English.

Each module is introduced with an audio voice-over so that students have the opportunity to hear a range of Australian accents and to follow the text.

Each module includes videos of students (or staff for module 4). In modules 1, 2, 3, and 5, these videos capture students’ own experiences of their language and learning difficulties and how they overcame them. The staff module includes videos of an academic staff member who outlines his expectations of students and particularly international students.

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\(^2\) It is expected that the student resource will be available on CD ROM. However, should the final size of the material prove too large a DVD will be produced. CD ROM is preferable in terms of compatibility with the range of computer that students will have.
Team and staff involvement at participating universities

All teams contributed to the ELG project by way of:

- Obtaining ethics approval, preparing modified advertising texts, consent forms, information sheets, etc.
- Gaining approval from Deans to promote the project within Divisions/Faculties.
- Provision of information regarding use of university logos, student profiles, ethics process, promotional strategies.
- Contribution to questionnaire survey content and format, interview schedules.
- Contributions to development of ELG website, online survey, and resource pages.
- Arranging trialing of and feedback on original survey and ELG website (including resources page) by external parties such as students and Language and Learning Support staff.
- Feedback on ELG posters and brochures and design of promotional strategies.
- Liaison with divisional staff and lecturers to identify target students and arrange class visits or other mechanisms to promote the project.

As lead institution, the Monash team undertook the primary load in getting the project up and running. In addition to the above, activities included:

- Considerable preparation involved in the development of ELG website and online survey.
- Design of posters and brochures for each university, liaison with other universities regarding advertising, publication/branding requirements.
- Video filming and editing of good exemplars of English language achievement for use on the ELG website.
- Arrangement of video conferencing, teleconferencing and face-to-face meetings with other project team members from other universities and the steering committee.

Established networks of teachers & researchers

Many links have been developed through the relationships that evolved over the course of this project. Not only does this relate to the team members and members of the steering committee, but also across faculties within participating universities. The project itself has fed into a number of national initiatives around ESL/EFL learners – for example, an ESL symposium held at UNSW in February 2009, the 2009 English Australia conference and the 2009 ALAA/ALANZ Conference held in Auckland.
Dissemination strategies and outcomes

<table>
<thead>
<tr>
<th>Proposed strategy</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>Project website</td>
<td><strong>Achieved</strong> – See commentary in Achievement of Project Deliverables above. During the data collection period, the ELG website received more than 11,000 hits and the student resources page 2,399 hits. A further 407 hits have been recorded for the resources page since the closure of the survey (end of April 2009), despite there being no further promotion of the site. <strong>Ongoing</strong> – The project report, CD ROM and teaching resources will be made available through the ELG and ALTC websites, supported by appropriate advertising to alert students, teaching staff and other relevant stakeholders to their release.</td>
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<tr>
<td>Engaging International student networks</td>
<td><strong>Achieved</strong> – International student networks and PG student organisations were actively engaged to explain the project and to encourage participation in the online survey. Student organisations assisted in providing distribution points for brochures and inserting news items about the project in online student newsletters. <strong>Ongoing</strong> – The ELG report and CD ROM will again be promoted through international student networks in 2010.</td>
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</table>
| News items on university and faculty web pages and student portals | **Achieved** – In the lead-up to and during the ELG survey (in 2008 & 2009), the project was widely publicised through notices in university and faculty newsletters (online & print), on student portals, and through Facebook groups. **Ongoing** – The ELG resources will continue to be promoted through news items and hosted web links at participating universities in 2010:  
  - Language & Learning Support units at participating universities will carry a link on their web pages to the ELG website.  
  - The ELG website link will be provided as a resource for students who have undertaken iDeaL (post-entry English language diagnostic tool) at Deakin. All commencing students are asked to complete iDeaL. See [www.deakin.edu.au/ideal](http://www.deakin.edu.au/ideal) |
| Brochures & posters advertising the project and survey  | **Achieved** – Brochures and posters were distributed/displayed widely on all participating campuses, in faculty offices, in student support services, in international offices, in student |

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### Direct email to international students

**Additional strategy** – Although not proposed in the original application, two of the participating universities were willing to promote the project and survey through a direct email to all onshore international students. The resulting peaks in visits to the ELG website and responses to the survey were vivid testimony to the effectiveness of this method of promotion.

**Ongoing** – Where universities are willing, this method will again be used to promote the completed project CD ROM and website.

### Incentives for students participating in the research component

**Additional strategy** – Again, this strategy was not proposed in the original application but was integral to attracting students 1) to visit the ELG website to find out what was on offer (and hopefully explore the learning resources while they were there) and 2) to complete the long and detailed survey. All students completing the survey in full were invited to enter a draw to win an iPod Nano (one iPod per university in 2008 and 2009). Students volunteering to participate in interviews were provided with double movie passes.

### Addressing students at orientation sessions and in lectures

**Achieved** –
- Presentations to promote the ELG website and survey by team members at international orientation sessions.
- Visits to lectures in undergraduate and postgraduate programs.
- Distribution of powerpoint advertisement for lecturers to display at commencement of lectures.

**Ongoing** – see Strategies for Launching ELG Report and Resources below.

### Interim workshops / seminars on campus to report on progress of the project

**Partially achieved** –
- Deakin University Teaching and Learning Conference 2009: Presented with Student Life, DUELI and School of Education colleagues

**Ongoing** – see Strategies for Launching ELG Report and Resources below.

### Outside seminars and conference presentations

**Achieved** – See below for details.
- Presentation at the UNSWIL Professional Development Conference for EAP teachers 2009
- Presentation at English Australia Conference, Sydney, 2009
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<table>
<thead>
<tr>
<th><strong>Conference presentations and workshops</strong></th>
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<tr>
<td><strong>English Australia Conference, Melbourne, September 2009</strong></td>
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<tr>
<td>Three members of the research team (Eva Bernat, Martin Davies and Carolyn Ritchie) presented the initial findings of the ELG project at the EA Conference, a major national conference attended by teachers of English as a foreign language who are predominantly engaged in teaching university preparation courses for overseas students in the ELICOS (English Language Courses for Overseas Students) sector. The conference was also widely attended by the Directors of Studies and other Management and Administrative staff from this sector. The audience showed keen interest in the study, with attendance estimated at over 50 delegates.</td>
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| **University of New South Wales Institute of Languages (UNSWIL) Professional Development Conference, Sydney, October 2009** |
| Following the success of the EA Conference presentation, Eva Bernat was invited to repeat the presentation at UNSWIL. Over 60 teachers of Academic English attended the presentation, which was followed by lengthy discussions. UNSWIL Management also showed great interest in the ELG study, and are keen to gain access to the resources that will be produced as part of the project deliverables. |

| **Combined Conference of Applied Linguistics Associations of NZ and Australia (ALAA/ALNZ), Auckland, December 2009** |
| Rhonda Oliver presented findings from the project. This conference was attended by academics and practitioners from around Australia, NZ and overseas. About 50-60 people attended this session. |

| **Proposed conferences (abstracts accepted):** |
| **InCULT: International Conference of University Learning & Teaching 2010** |
| http://www.herts.ac.uk/more/incult-conference/ |
| Location: University of Hertfordshire, UK |
| Title: English Language Growth after University Entry |
| Strand: International, Intercultural and Diversity Issues |
| Presenter: Dr Judith Rochecouste |
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EUROSLA: European Second Language Association Conference 2010
http://eurosla.org/eurosla20home.html
Location: Università di Modena e Reggio Emilia, Reggio Emilia, Italy
Title: The changing learning strategy needs among university students.
Strand: Language learning strategies
Presenters: Dr Judith Rochecouste, Professor Rhonda Oliver

Proposed workshops/seminars:

Monash University
Seminar/launch of project deliverables and report at the Centre for the Advancement of Learning and Teaching, Caulfield Campus, Monash University, June 2010.

The University of Melbourne
Seminars will be conducted/papers presented in the following fora:
1) Semester 2 2010 - Faculty of Business and Economics Teaching & Learning Unit Seminar Series http://tlu.ecom.unimelb.edu.au/teaching_staff/seminar_series/
2) February 2011 - Annual Faculty of Business and Economics Teaching & Learning Forum http://tlu.ecom.unimelb.edu.au/teaching_staff/forum/

Deakin University
Seminar/launch of project deliverables and report June 2010.

Macquarie University
Seminar/launch of project deliverables and report June 2010.

Edith Cowan University
Seminar/launch of project deliverables and report June 2010.

Strategies for launching the ELG report and resources
A range of strategies will be employed over the coming months to launch the ELG report and resources, including:

- Workshops, seminars and/or launch functions for staff will be conducted at all participating universities over the coming months. Staff will learn about the project and receive a free CD ROM and details of the ELG website, which will provide access to the full report and teaching resource.

- The student CD ROM will be distributed through:
  - academic support/services
  - international student offices
  - international student orientation sessions
  - Faculty/school offices
  - unit coordinators
  - university libraries.
These channels for distribution will vary in each university.

- Advertising via:
  - Student portals
  - Blackboard and other learning management systems
  - University news items/memos etc.
  - Printed flyers distributed at participating universities to coincide with the distribution or the student resource.
  - News item re launch on university homepages.

- CD ROMs will NOT be protected so they can be copied onto a computer or another disk for wide use in the Australian university sector.

- The Chief Investigator will endeavour to secure an article in The Australian or Financial Review Higher Education supplement at the time of the launch of the materials.

**Scope for implementation in institutions**

It is difficult to provide an accurate forecast about how amenable the materials will be for implementation within different institutions, however, the support shown by those who have attended conference presentations nationally, plus the high level of interest of the participants themselves in the website and the resources suggest that implementation will be highly amenable to a variety of institutions.

**Critical factors for success**

- We were pleased with the number of students who completed the survey (798), which enabled adequate numbers for statistical analysis. We believe that offering students the chance to win an iPod Nano was a critical factor in achieving this response rate.

- We were particularly impressed by – and grateful for – the time and attention that students gave to responding to open-ended questions. The descriptions they gave of their experiences at university in Australia provided a large and very rich body of qualitative data – a far greater contribution than we had expected and one which obviated any need for extensive interviews as we had originally planned.

- Collaboration of staff at all five universities was critical, especially with regard to obtaining ethics, providing opportunities for the promotion of the project, accessing IT and record support (especially, but not only for obtaining the GPAs). Only by having support at the highest level of all universities was it possible to undertake the type of data collection that occurred (through the survey, interviews and GPAs).

- Good communication between the team enabled a coordinated approach. This was enhanced by the development of the internet hub and also by the regular contact made with all members (both of the research team and the steering committee) first by way of the project manager’s ongoing correspondence and second with respect to the regular meetings.

- Our research team proved to be an amicable and dedicated group even though everyone’s attention to the project competed with many other demands and commitments.
Also critical to the success of the project was the coordinated management of the project, especially ensuring that milestones (in most cases) were met in a timely manner. These aspects were achieved because of the experience of the chief investigators, and also because of the diligence and tenacity of the project manager.

Challenges and factors that impeded success

- An early challenge to the success of the project was the difficulty of obtaining ethics approval from five different universities – all with their own procedures and requirements. Meeting privacy requirements for access to student data was a particular hurdle. Consequently the data collection could not begin until later in the first year of the project, and towards the end of the second semester thus coinciding with end of semester assignment/exam demands.
- Developing data collection instruments is time consuming and always a matter of compromise – this is particularly so when developing instruments that are suitable for NESB students of varying language abilities.
- The cost of web development was under-estimated in the budget but fortunately covered by considerable savings in airfares and accommodation.
- Although an adequate sample population was achieved, only a small proportion of the total number of international students at the five universities participated in the survey. This is understandable, given the length of the survey and the fact that international students are already time poor and often lacking confidence in their language skills.
- Advertising and recruitment opportunities varied across the five universities. In some cases it was possible to directly email students, which was a highly effective strategy. However in other universities it was not possible to directly approach students, thereby hindering access to possible volunteers and having to rely on indirect approaches.
- We found it difficult in all universities to convince students and staff to volunteer and/or attend interviews and focus groups. Fortunately, the depth and quality of the responses provided by students to open-ended questions on the survey more than compensated for our inability to recruit interviewees.
- Another difficulty was that, in working across five universities with staff who already had many other demands on their time, it was not always possible to have all team members participate (at meetings for instance) or to contribute in a timely manner.
- As with all projects, there were also unexpected hindrances. For instance the consultant hired to develop the ELG hub, the data collection processes and the ELG resources was forced to interrupt his involvement in the project because he had exceeded his total contracted hours with the University and this required a new contract to be arranged before work could continue.
- Subcontracting of the Java structure and the graphics for the digital resource was delayed due to our inability to find an appropriately skilled person who was willing to do a relatively small-scale job.
- This was a large-scale study and the data collected, particularly qualitative data, were extensive. Although this is a very positive outcome, it also meant that to adequately address the messages that students were embedding in their responses, the writing up of the final report and the development of the resource took over three months. This in turn meant that the time required to do justice to a staff resource
was extremely limited. It is therefore expected that much of the dissemination of this project will occur after final completion of the project report and the resource development.

- Similarly our inability to keep to the initial timeline due to the above problems has delayed the trialing of the students’ resource and its availability for distribution at participating universities during orientation Week 2010.

**General lessons learnt**

- Multi-site projects require an early start to ethics applications (certainly as soon as funding is approved) and considerable coordination.

- Collaborative projects inherently involve many points of view and are therefore likely to involve many changes (costly in terms of web development if not controlled).

- The direct approach in recruiting students to complete surveys works best with direct email (where permitted by university ethics) or with face-to-face appeals in classes, supported by blanket advertising by way of posters, web news items, brochures.

- Project leaders need to be mindful to print twice as much promotional material as estimated to reach the target audience (and to ensure that this in the initial budget).

- Incentives for students to complete surveys are a must. These too need to be included in the initial budget.

- Online questionnaires (especially complex ones) require many weeks of review and trialing to get them operating accurately and efficiently to collect reliable data and to keep respondents engaged. Long questionnaires should generally be avoided. This may require the planned project objectives to be limited.

**Evaluation, Linkages & Impact**

**Formative and summative evaluation processes used**

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<tr>
<th>Evaluation strategies proposed in application</th>
<th>Outcome</th>
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<tr>
<td>Reports and presentations to Steering Committee</td>
<td><strong>Achieved</strong> – Three Steering Committee meetings were convened during the term of the project and the feedback provided helped to shape the project.</td>
</tr>
<tr>
<td>Progress reports to ALTC</td>
<td><strong>Achieved</strong> – All interim reports were submitted on time. The final report was delayed by two months due to delays in securing subcontractor for digital resource development.</td>
</tr>
<tr>
<td>On-going presentations by project members at participating universities/</td>
<td><strong>Modified</strong> – Rather than presentations to stakeholders, each team sought feedback on project deliverables (e.g., website, resources, survey) directly from academic and learning &amp;</td>
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| student focus groups | learning support staff, and from individual international students. This included a live trial of the online survey with volunteer students and learning support staff. As a result of feedback, the survey and website were refined to provide greater transparency to users as to the purpose of particular elements and to provide access to a wider range of resources, categorised according to themes and language skills. |
| Trialling of student CD ROM by volunteer international students and experts in higher education learning | Delayed – The major data collection (by way of online survey and interviews) needed to continue into Semester 1, 2009, due to delayed start for survey in 2008. This delayed commencement of work on staff and student resources by 2-3 months. Further delays were experienced in securing the services of a suitable graphics consultant for the CD ROM. |
| Staff resource to be reviewed by appropriately qualified academic & learning support staff | Partially achieved – |
| Measure of demand/ interest in ELG project deliverables | • To date, feedback from students, academics and teaching and learning support staff has generally been very positive. |
| | • During the course of the data collection period, the ELG website homepage received more than 11,000 hits and the student resources page 2,399 hits, demonstrating a high level of interest and need in this area. |
| | • Strong interest from outside organisations has been expressed to team members who have given conference presentations outlining the project objectives and findings. Interest is particularly focused on being able to obtain access to the student CD ROM. English Australia has also expressed a strong interest in the project and has asked to be kept informed of developments. |

Evaluation outcomes (including evidence of the impact of the project and value to the sector)

1. An independent evaluation report on the project is available.

2. Evaluation of Student Resource

Evaluation of the student resource was carried out throughout its development. The project team provided ongoing feedback on the content of the five modules, formatting and layout.
At the point of completion the content of the CD ROM was made available on the ELG website for ease of access, and students and staff (lecturers and academic/learning skills advisors) were invited to evaluate the resource. Feedback was sought on design, navigation, download speed, and the content, the outcome of which is as follows:

Design Evaluation:
- Responses to the design were generally very positive although some concerns were expressed about the choice of/use of colour for content text.
- Some students found that the full pages did not fit into their laptop screens.
- Some users objected to the Australian accents used in the voiceover.

Navigation
- Navigation attracted the most negative feedback, particularly relating to the continual re-running of the voice-overs.
- Some requested better sequencing between the modules with links from one to the next without returning to the home page.
- Some users expected ‘close’ buttons for various pages, others requested more icons to aid navigation.

Download speed
- Download speed was unproblematic for users with broadband. However those students working from home with limited connectivity found that the videos took a long time to download. This of course is the reason why the resource will be made available as a CD ROM in its final version.

Content
- Generally the resource content was positively evaluated and described as ‘useful’ and ‘timely’.
- The video clips of students’ actual experiences were very popular.
- While a few respondents felt that the wording was too complex for some international or ESL students, others praised the developers from not making the language patronisingly easy.
- Some felt that there was simply too much on the website. We envisage however that if provided on a CD ROM, the opposite expectation would result, that is a good quantity of information.
- Some users expected there to be actual language practice activities, i.e., that the resource was an actual learning tool.
- The videos were highly praised, inviting the following feedback: “Very vivid examples, very persuasive, the best part of the website. Excellent”; “The students’ perspective is always interesting”; “Very useful and interesting”.

In conclusion, the resource as a whole was deemed as “very impressive”; “warm and inviting”; “clearly designed”; “easy to follow” by a number of respondents. The developers took immediate note of the feedback and responded accordingly.
Links with other projects in the ALTC Strategic Priority Areas

The project responds to the ALTC principle of collaboration between people within the higher education sector nationally, involving as it does five universities in three states. The project also contributes to the ALTC principle of excellence through the enhancement of learning and teaching in higher education. In terms of ALTC priorities, the project specifically addresses Priority 2: Strategic approaches to learning and teaching that address the increasing diversity of the student body.

This project has relevance to the following recent ALTC projects:

1) Diversity: A longitudinal study of how student diversity related to resilience and successful progress in a new generation university (2006, Edith Cowan University);

2) Investigating the efficacy of culturally specific academic literacy and academic honesty resources for Chinese students (2008, Victoria University);

3) Double degrees: research pathways, enabling cross-disciplinarity and enhancing international competitiveness (2009, University of Technology, Sydney);

4) Promoting resilience and effective workplace functioning in international students enrolled in health courses (2009, The Australian National University);

5) Embedding the development and grading of generic skills across the business curriculum (2008, Macquarie University);

6) Enabling commencing students’ success with early assessment: Best practice resources and interventions to facilitate self-regulation (2008, Griffith University);

7) Moderation for fair assessment in transnational learning and teaching (2008, University of South Australia).
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Appendices

Appendix 1: Socio-cultural and Academic Adjustment

Socio-cultural Adjustment

Acculturative stress (after Berry, Kim et al. 1987) was measured among international students by Yeh and Inose (2003). Acculturative stress relates to stress generated from cross-cultural encounters. Yeh and Inose report English language fluency as a “significant predictor of acculturative stress” (p.23) as were “social connectedness and social support satisfaction” (p.23). The latter they attribute to “the priority placed on relationships by international students from interdependent cultures” (p.24).

Some scholars have highlighted fundamental cultural differences as causing considerable stress among international students (e.g., international students from agricultural/collectivist backgrounds in an industrial/individualist society (Rao 1979); or Confucian-heritage Chinese students in New Zealand (Holmes 2004)). Others propose students’ high expectations (Barker 1990) as well as inadequate language proficiency (Church 1982; Campbell and Guyton 2003) as causes of stress. Campbell (2004) cites incorrect preconceptions of New Zealand and western society in general as creating disappointment for international students, particularly those from highly populated urban areas in China. Moreover, the “inability to communicate effectively with their host families made the students feel helpless and lonely, and exacerbated their homesickness” (Campbell 2004, p.118). However Campbell’s research of Chinese students in New Zealand also shows “emotional warmth” to be “even more important than language environment” (p.122), which she attributes to the importance of family in China and the one-child policy that situates the child at the centre of attention within the family (p.124). Additionally, maintaining one’s identity in the face of common practices in western host countries (e.g., alcohol, sex, over-casual forms of address and humour) is highlighted by Pritchard and Skinner (2002) as a factor that impacts on international students in Ireland. Sri Lankan students in this study were unable to remain uncritical of what they observed and were at the same time offended by local ignorance of their own cultures (p.345).

Understandably, these attitudes will tempt international students to socialise with their own linguistic and cultural groups. Indeed Rambureth (2001) reports students deliberately not adjusting “for fear of not being able to readjust on their return home” (p.10). Tan and Goh’s (2006) Chinese international student cohort maintained that their own cultural group provided them with a sense of security and that cross-cultural friendships with Australians were most often superficial and lacked any commitment to reciprocity. Volet and Ang (1998) suggest that academic staff take some responsibility for the development of successful intercultural relationships by creating culturally mixed groups and monitoring the social dynamics therein. Volet and Ang show that “after a successful experience of culturally mixed group work, students realise that cultural differences may not be as important as having similar goals and a mutual commitment to invest time and energy in the task” (p.20), a view also supported by Gudykunst, Nishida and Chua (1987). In fact language learners studied by Ewald (2007) also “pointed to the key role of the teacher in producing and relieving anxiety” (p.122).

The loneliness experienced by international students has been the subject of research by Sawir, Marginson, Deumert, Nyland and Ramia (2008). In addition to emotional and social loneliness, they note evidence of cultural loneliness “triggered by the absence of the preferred cultural and/or linguistic environment” (p.171). Cultural loneliness may occur in spite of good social networks and personal support. The importance of social support for international students is also reported by Sumer, Poyrazli and Grahame (2008) who found that lower levels of social support contributed significantly to depression and anxiety. Anxiety was also more evident among older students, which
Sumer et al. suggest results from less flexibility in adapting to a new culture and environment. This study also linked lower levels of English language proficiency to depression and anxiety (as do Surdam and Collins 1984; Poyrazli, Arbona et al. 2002; Yeh and Inose 2003).

International students are confronted with many new and unnerving experiences when arriving in the country of their study institution and terms such as ‘culture shock’ and ‘study shock’ abound in the literature. Clearly a degree of resilience is needed for students to achieve in a new social, cultural and academic environment. Resilience (as measured by seven sub-scales developed by Organisational Development Resources) (1996) during periods of adjustment to university has been correlated with fewer adjustment problems by Wang (2009). Wang therefore recommends resilience training for students and support staff. Ramsey, Barker and Jones (1999), however, observed students who did manage a “balance between the demands of the learning environment and the resources of the person” (p.141) and, contrary to need for resilience, Holmes’ (2004) study of participants from a New Zealand university showed that the “assumption that success is equated with effort and willpower (Lee 1996) for example, was misleading as a gauge for success” (Holmes 2004, p.298).

Academic Adjustment

Information literacy provides additional barriers to students, and particularly to international students who may lack familiarity with computers, not to mention online cataloguing systems, databases, etc. Alternatively the students may lack adequate English, particularly vocabulary and phraseology, to perform successful databases searches through keywords, etc. Thus, the demands of academic literacy and information literacy are combined when students venture beyond their textbooks to their first encounters with online databases of academic journals, written by peers for their peers in the discourse of the discipline area. Not surprisingly, library anxiety can be prevalent among international and local students alike. Onwuegbuzie and Jiao (2004) provide evidence that “library anxiety is related negatively to research performance” (p.51). They describe library anxiety as having a "potentially debilitative effect" (p.51) on course grades. Baron and Strout-Dapaz’s (2001) investigation of university library instructional services support the need for helping international students raise their comfort levels in using library resources. Conteh-Morgan (2001) proposes that information literacy instruction should be provided through the collaboration of library staff and ESL instructors. This is because ESL instructors can offer a low-anxiety environment for teaching information literacy, which is a high anxiety endeavour. Others, such as Hurley, Hegarty, & Bolger (2006), prefer information literacy to be embedded within Critical Thinking and Research Skills modules.

Holmes’ students were also surprised by the dialogic communication patterns within the classroom (e.g., group discussions), which they interpreted as familiarity between the academic staff member and the students (p.299). Biggs (1996) points out that this type of academic discussion will occur between students outside the classroom in private study groups rather than in the classroom. Ramsey et al’s (1999) participants however, showed a more considered approach to study groups by evaluating independent study groups “in terms of their short- and long-term value along a number dimensions” (p.141).

Oral participation, or the absence of it, is a considerable concern in much of the literature on international students’ adjustments and achievement. Not only does the international student share with the local student the fear of saying something wrong or trivial and experiencing subsequent ‘loss of face’, but there is also the fear of displaying one’s linguistic inadequacy. For many students also this fear is further exacerbated by protocols of silence and politeness/respect. Lee (2007) for example has found that East Asian students’ “self-perceived English language articulation, English speaking anxiety
and fear of negative evaluation were correlated significantly with oral participation” (p.41), a finding which supports that of MacIntyre, Noels and Clement (1997), Aida (1994), Cheng, Horwitz and Schalleri (1999) and Horwitz, Horwitz and Cope (1986). Nonetheless, as Nakane (2006) notes, international students are most likely to be evaluated negatively for not participating in classroom discussions. According to Nakane, silence, while seen as a face-saving strategy for the Japanese students, is in fact a face-threatening action for Australian lecturers. Nakane (after Sifianou 1997) proposes that lecturers need to be aware of the role of politeness that may be embedded in students’ silences.

The relatively little English spoken by some international students is of continual concern among academics in many Australian universities. For example Fegan (2008) found that most of the 40 undergraduate students whom she interviewed spoke less than two hours of English in a day and eight of this cohort spoke English for less than 30 minutes. Fegan concludes that “[I]nternational students may find that their foreign study experience is socially dysfunctional, and their aspirations to become more conversationally adept in English are stymied because the opportunities to speak English tend to be limited to conversations with other international students. Thus, they miss out on acquiring English as it is spoken by Australian natives, with its colloquialisms, idioms, slang, ironic asides, chit chats and subtle nuances” (p.22).

Strategies for more inclusive participatory multicultural classrooms are provided by De Vita (2000), while Gerbic (2005) raises the role of computer-mediated communication (CMC). She provides evidence of increased participation by Chinese students in learning situations that used CMC, whereas local (New Zealand) students experienced greater communication anxiety with this mode of learning.

International students’ silence in class may also be attributed to their prior learning experience. Many have experienced a mainly didactic, teacher-centred mode of education where discussion and oral language practice do not feature strongly (after Wong 2004; see Sawir 2005, p.570). Further to this, previous English language study will have commonly focused on grammatical accuracy to the detriment of communicative competence (Sawir 2005, p.373). Prior learning experience is also seen to deter analytical and critical approaches to learning, as Ninnes, Aitchison and Shoba (1999) demonstrated was the case for Indian students whose initial educational experiences were dominated by the prevalence of exams. The absence of questioning in Chinese education, so often mooted by studies from that education system, is however refuted by Cheng (2000). Cheng points out that the Chinese term for knowledge is constructed from two characters, xue (to learn) and wen (ask) and that “[I]this means that the action of enquiring and questioning is central to the quest for knowledge. So respect for teachers does not seem to be a major cause for some Asian students’ reticence in class, and the notion that Asian students are not inclined to challenge the teacher’s authority is largely an illusion.” (p.440-1). This supports claims by Watkins and Biggs (2001).

Tatar’s (2005) study of Turkish students at a US university showed the students’ concern about the quality of participation in group discussions, where what they considered inappropriate personal opinions were shared rather than “formally acquired academic knowledge” (p.343). As a result, their participation was governed by the need to build their confidence in this new learning environment, rather than by a need for knowledge acquisition per se. Nonetheless, participation was still subject to the classroom climate whereby some classrooms “facilitated active oral participation, whereas high-anxiety atmospheres increased feelings of isolation” (p.349). This view is supported by Cheng (2000) who, after Tsui (1996), claims that “the degree of anxiety in the language classroom largely depends on the teacher’s strategies (e.g., questioning techniques). Successful strategies minimise language learning anxiety and unsuccessful strategies exacerbate language learning anxiety” (Tsui in Cheng, p.441).
Cheng prefers to attribute international students’ reticence to a combination of factors, for example, “[w]hen behaviour of reticence and passivity is observed in class, it may result from unsuitable methodology, lack of required language proficiency, irrelevant or even offensive topics, lack of rapport between the teacher and the students, lack of motivation, and even students' mood on a particular day” (Cheng 2000, p442). Borland and Pearce (2002) refer similarly to the “complex interaction of linguistic and cultural experiences that underpin student preparedness and capacity to cope with the demands of university study” (p.122).

A further contributor to classroom reticence is the difficulty that many international students have in understanding host country students’ accents and prevalent use of idiomatic speech (Yamada 2003). Unlike reading and writing, which are often the skills emphasised in learning English in Asian countries, speaking and listening do not proceed at one’s own pace. Several of Yamada’s small group of study participants “implemented a self-reliance strategy in which they interacted with native speakers outside classrooms and reported that it helped them to improve their skills” (p.12).

As seen above, the notion of sociolinguistic competence features strongly in research into adjustment. This notion extends the English language requirements of international students from phonological, syntactic and semantic proficiency to knowing how language is used in the new culture: that is, what to say and where to say it. In fact near native competence may actually mask a lack of sociolinguistic competence (see Cummins 1986) and an understanding of the various disciplinary discourses required during the course of study. Such findings suggest that universities should take a closer look at their students’ ongoing language development, not only as evidenced in written assessments, but also in terms of their sociolinguistic competence.

The research described here also brings into question Australian universities’ current commitment to the concept of internationalisation. As Woolf (2002) states, “one measure of the efficacy of [international] education must...be the degree to which it brings tolerance, respect, and an appreciation of diversity” (p.6). Indeed in recent years global literacy or the “ability to function effectively in the global community” (Schuerholz-Lehr 2007, p.183), together with tertiary and information literacy, is generally encompassed in the graduate attribute statements which universities expect their students to achieve. To this end, Schuerholz and Lehr (2007) investigated activities available to faculty staff that can serve to embed global awareness and intercultural competence into university courses and found little evidence that these traits do actually transfer into teaching practice and course design.
Appendix 2: Learning Approaches

The role of memorizing has generated considerable debate in the literature. For example, the contrast between memorizing which is rote learning and memorizing with understanding (see Kember 1996, p.343), surface versus deep memorisation (Tang 1991), and Watkins’ (1991) definition of intention as combining understanding and memorizing. Marton, Dall’Alba and Tse (1996) propose a contrast between mechanical memorisation and memorisation with understanding, while Kember and Gow (1994) contrast bottom-up processing (deciphering at the word/sentence level) with top-down processing (drawing on existing schemas to construct a personal understanding).

Kolb and Fry (1975) propose a learning cycle (subsequently called Kolb’s Learning Cycle) whereby concrete experience (phase 1) is observed and reflected upon (phase 2) to form abstract concepts (phase 3) which are tested in new situations (phase 4). Kolb and Fry’s work has given rise to a number of reinterpretations and elaborations (e.g. Honey and Mumford 1982). Jarvis (1992, 1993) considers that learning is a personal and subjective experience involving personal change. The absence of change is “non-learning”. He proposes causes of non-learning and variations in the quality of change such as presumption (I know that already), non-consideration (I don’t need to know that) and rejection (I have thought about it but it is not something I need to know) (see Hay, Kinchin et al. 2008, p.297). A further contrast in learning is made between reflective learning or using practice, evaluation, reasoning and memory to achieve change or non-reflective learning which relies on memory alone (p.297).

Andreou, Andreou and Vlachos (2005) provide a link between the extensive field of language learning research and the learning approaches proposed above. They add two further approaches to the deep, surface, strategic set proposed by Biggs and others. These include “metacognitive awareness” and “academic self-confidence”. Metacognitive awareness “consists of the students’ awareness of effort in studying and the value of memorizing as a learning skill, and academic self-confidence, which refers to students’ faith in ability to look for meaning and determination to excel” (p.30). The suggestions of Andreou go some way to addressing Skyrme’s (2005) concern about the lack of research on using one’s “second language as a learning resource for disciplinary study in a second language” (p.1).

Watkins, Biggs and Regmi (1991) investigate the impact of the medium of instruction on students’ approaches to learning. Their research shows that studying in a language in which one lacks confidence (e.g., an L2) affects a student’s approach to learning. They found, not surprisingly, that less confident students “are more likely to rely on rote-learning” (p.338) without understanding, while students more confident in the language of instruction “are more likely to adopt highly organised learning…strategies” (p.338). This research contradicts to some degree that of Biggs (1987) whose Australian native English speaking students actually used deep learning approaches less than their colleagues who were using English as a second language. Biggs (1989) attributes this to the demands on international students to continually seek meaning from what they hear and read, a conclusion also supported by Cantwell and Biggs (1988). Those native speakers who did use a deep approach benefited from their understanding at the “word and theme level” which enabled support for their conceptualisation and argumentation. ESL writers’ deep approaches, however, were hindered by a lack of “rhetorical competence”.

Not all investigations of learning approaches and academic achievement show a significant relationship suggesting that academic success is achieved in the face a complex set of variables and the view that learning approaches alone have an impact on success is “overly simplistic” (Najar and Davis 2001, p.19). Najar and Davis (2001) studied Arts, Education and Science students in an Australian university over a three
year period and only found a short-term link between low GPAs and surface approaches, suggesting that students became more discerning in their approaches to learning over time (p.19). However, neither a deep approach nor a deep achieving approach correlated with GPAs and this raises concerns about the measurement of both learning approaches and academic success (p.19). (See the final section of Section 2 for an overview of research exploring the reliability of measures of academic performance and English proficiency such as GPA and IELTS/TOEFL.)

On the other hand, correlations using Biggs’ Study Process Questionnaire (SPQ) and GPAs by Zeegers (2001) show a consistent positive correlation between the deep approach and the annual GPA and a small negative correlation with surface approach in later years. Zeegers suggests several reasons for this: i) increasing interest in the subject (science) as studies become more specialised; ii) with time the less achieving students drop out; and iii) coming to terms with workloads etc., in the later years of study (p.126).

Numerous scholars claim that the learning approach taken is determined by the particular task requirements and goals (e.g., Stein 1978; Entwistle 1987; Biggs 1989; Biggs 1990), thus highlighting the importance of flexibility and redefining the notion of a deep approach as one which “requires flexibility in the choice of learning strategies, and the ability to tailor this flexibility to the retrieval situation” (Najar and Davis 2001, p.20). Here the approach draws on cognitive and metacognitive strategies for transferring skills across learning tasks/situations: strategies that feature strongly in research into second language acquisition, as Najar and Davis (2001, p.20) state:

Successful learners possess an array of techniques, or cognitive strategies, for accomplishing goals; metacognitive knowledge about when and how to use these strategies; and an extensive non-strategic knowledge base (declarative or content knowledge) that can be used in conjunction with strategic and metacognitive processes (Pressley, Borkowski et al. 1984; Pressley, Goodchild et al. 1989).

Deep and strategic approaches to learning naturally involve critical thinking—a skill that many claim is not familiar to international students. Coster and Ledovski (2005) report on the use of online discussion and reflective journals for developing critical thinking skills among English language learners. Students were exposed to modelled critical responses and questions that they should be asking themselves about their material. The online activity allowed students to “actively and passively develop their critical thinking and English expression without the constraints of time and criticism and consequent loss of face” (p.7). Similar pre-departure training for international students has been reported by Elsegood (2007), where the Indonesian students involved were found to be unable to identify how a case or argument was built up in a text—that is, they could not identify the “flow of logical reasoning” (p.5). Students were also unaware of the structure of Western reasoning which embodies a hierarchy of major and minor points. The subsequent teaching strategy involved “deconstructing, reconstructing and constructing ‘claims and supports’ in spoken and written texts using diagramming techniques to ‘map’ logical reasoning” (p.1). Elsegood warns that such inabilities are due to differences in knowledge construction across cultures and should not be interpreted as deficit. This has particular implications for transnational courses where shared understanding of knowledge and learning approaches is threatened by distance, lack of contact and a tendency for making assumptions on the basis of stereotypes (see Galligan 2007).

Mayya, Rao, and Ramnarayan (2004) have conducted research to show significant correlations between academic issues (e.g., difficulty speaking English, poor teaching, inaudible lectures, inability to concentrate, irrelevant topics), non-academic problems (e.g., health, diet, family and financial issues, homesickness), and a surface approach to learning. Mayya et al also found a negative relationship between a surface approach
and academic performance. Cooper’s (2004) comparison of Australian and Malaysian Chinese students of Accounting showed that the latter group scored more for both surface and deep approaches (see also Ramburuth 2000). However, there was a positive correlation between the Malaysian Chinese students’ surface approach scores and their academic performance, indicating that memorization as practised by these students could “deepen and develop understanding” (Cooper, 2004, p.305) (see also Marton, Dall’Alba et al. 1993). On the other hand, a surface approach for the Australian students correlated with the lower end of the achievement scale, while deep-achieving approaches correlated with higher academic achievement. Cooper’s (2004) research, and that of Ramburuth (2000), provide support for an achieving approach where the constructs of deep and surface learning may not be mutually exclusive.

**Cultural learning styles** are also important in students learning. Le and Shi (2006) provide a valuable review of research on the Chinese learning experience and note especially that learning and academic achievement are two separate issues for the Chinese learner, with greater importance placed on academic success. At the same time, they warn (as does Smith 2001) against treating Chinese students from different countries as a homogenous group, noting that “very few comparative studies have shed light on the identification of differences in learning approaches between Chinese background students with different nationalities or ethnicities, i.e., from mainland China, Malaysia, Singapore, and Hong Kong” (Le & Shi 2006, p.1).

Regardless of their country of origin, international students and their families make an enormous investment when making the decision to study overseas, and so will be highly motivated to achieve and are most likely to use a range of approaches to meet their goals. Indeed, Devine’s (1999) longitudinal study of international students undertaking an ELICOS program in Australia shows evidence of “a compulsion to adapt” to the new learning context and to adopt its values. Ramsey, Barker and Jones (1999) also report that a number of international students in their study “commented favourably on the more open, critical approach to education in comparison with their own countries” (p.142).
Motivation

Various types of motivation for learning English as a second/foreign language have been identified. Using the term “orientation” meaning “reasons for” studying English, scholars make a distinction between instrumental orientation (or pragmatic reasons such as getting a visa or a job) and integrative orientation (identification with the L2 community) (e.g., Gardner 1985; Gardner, Moorcroft et al. 1989; Gardner and MacIntyre 1991; Masgoret and Gardner 2003; Bernaus and Gardner 2008; Kouritzin, Piquemal et al. 2009). Deci and Ryan (1985; 2002) propose a further categorisation: intrinsic and extrinsic motivation. If intrinsically motivated, the learner will engage in L2 learning activities “for the inherent pleasure and satisfaction derived from doing so” (cited in Pae 2008, p.7). Extrinsic motivation on the other hand comes from “some instrumental ends that are external to the activity” (p8).

Pae argues that intrinsic motivation is important because of its influence on learners’ self-confidence and motivation to learn, but it is only a necessary and not sufficient condition of successful L2 achievement. For example, Bonney, Cortina, Smith-Darden and Fiori (2008) report integrative motivation (after Oxford 1994; Oxford and Shearin 1994) as predictive of “use of extracurricular learning activities, cognitive and analytic learning strategies, contextual compensatory strategies, as well as collaborative learning strategies” (Bonney et al., 2008, p.8) (e.g., such as joining study groups). Students with integrative motivation therefore were more likely to immerse themselves in the target culture thereby increasing their contact with native speakers. Such students were also more likely to use compensatory strategies (e.g., synonyms, confirmation checks, body language, asking the interlocutor to slow down, or guessing meaning from context). For Masgoret and Gardner (2003), integrative motivation includes integrativeness (e.g., the desire to identify with the target community), attitudes to the learning situation, and motivation. The latter (motivation) shows a uniformly higher correlation with language learning achievement than the other component variables.

The affective correlates of achievement have also been studied by Hsieh (2008) who reports that positive attitude and low anxiety are better predictors of language achievement than self-efficacy or the belief in one’s own ability to achieve. Successful learners were also more integratively-oriented in wanting to be able to communicate with people from the target culture. Lack of success correlated with anxiety about the target language and nervousness about speaking in class. Hsieh also reports an effect for “heritage connection” (A cultural or ethnic connection to the language to the target language). Heritage-linked students showed less anxiety and more positive attitudes (regardless or their level of success) than non-heritage students.

Csizer and Dornyei (2005a), using Dornyei’s L2 Motivational Self System (Dornyei 2005) found that highly motivated students developed an ideal L2 self. By contrast, low motivation was characterised by a general lack of interest in “foreign languages, cultures, and language learning” (Csizer & Dornyei 2005a, p.654) and an ought-to L2 self. The “ought-to L2 self” refers to the attributes that one believes one ought to possess (i.e., various duties, obligations, or responsibilities) and that therefore may bear little resemblance to one’s own desires or wishes” (p.617). The ideal L2 self is more proactive in attaining mastery of a language and equates to the integrative disposition described above.

Dornyei (2000) questions the tendency of motivational research to describe motivation as “a relatively stable emotional or mental state, measurable at a particular point in time” (p.521). Instead he suggests a dynamic and fluctuating mental state that needs nurturing and maintaining, where motivation is a set of phases (pre-actional, actional,
and post-actional) and should be viewed as a process model (see also Gardner 2001). Dornyei (2001) provides a thorough review of language learning motivation research and includes yet further dimensions to this popular and important area of research, e.g., teacher motivation, motivation and learning strategy use, demotivation, and willingness to communicate (after McCroskey and Baer 1985).

A further construct in the area of motivation research that is relevant to our study has been presented by Yashima (2002). This is “international posture” which incorporates “interest in foreign or international affairs, willingness to go overseas to stay or work, readiness to interact with intercultural partners, and, one hopes, openness or a non-ethnocentric attitude toward different cultures” (p.57). Yashima shows that international posture directly influences willingness to communicate:

It is not surprising that the more internationally oriented an individual was, the more willing he or she was to communicate in English. Such individuals are also more motivated to study English, and this motivation, in turn, contributes to proficiency and confidence in L2 communication. (Yashima, p.62)

The notion of willingness to communicate (WTC) defined “as a readiness to enter into discourse at a particular time with a specific person or persons, using a L2” by MacIntyre, Dornyei, Clement & Noels (1998, p.547) has attracted numerous researchers. MacIntyre et al. (1998) for example maintain that self-confidence and social context are important factors in determining a student’s willingness to communicate in a second or foreign language. MacIntyre, Baker, Clement and Conrod (2001) offer a further influence on WTC: “beliefs concerning opportunities, such as the opportunity for L2 communication” (p.382), while Hashimoto (2002) has found that perceived competence (mediated by L2 anxiety levels) impacts on WTC and subsequently on more L2 use. Thus WTC, or the lack of WTC, has between attributed to a range of factors.

Dornyei and Kormos (2000) investigated the relationship between students’ contributions to an L2 oral task (e.g., quantity of speech and number of turns), their motivation, proficiency, and their willingness to speak in their first language. Not unexpectedly, “motivational variables were found to make a significant impact on the learners’ task engagement” (p.294) among students with positive attitudes towards the task. A further positive relationship for this group was found between the interpersonal relationship between the participants (in dyad tasks) and proficiency, and between willingness to communicate in the L1 and proficiency.

In their study of the relationship between language attitudes and motivational behaviour, Tremblay and Gardner (1995) propose a model of measurement for affective factors. They define a motivation construct that includes self-efficacy; valence (or the attractiveness of the learning task to the learner); causal attributions (or “the impact of past events” (p.507)); and goal setting (whereby students who set difficult goals will outperform those with do my best or easy goals). They show that “goals influence performance by increasing intensity, persistence, and attention” (p.515) and by extension, attitudes towards achievement. Valence (or attractiveness of the task) and self-efficacy were also found to be influential factors.

Clearly these results show us that what we ask students to do influences their motivation, and in turn their ability, to do it, or as Dornyei and Kormos (2000) suggest, attitudes towards the task act as a filter for its successful achievement (p.288). Taking the study of attitudes to tasks further, Guilloteaux and Dornyei (2008) show a strong positive relationship between language teachers’ motivational practice on students’ language learning motivation. That is ‘students’ appraisal of the language course in general has a bearing on how they approach the specific learning tasks (i.e., their learning behaviour) in the course, regardless of their attitudes toward the actual task” (p.70).
Also important for our study of international students is research by Woodrow and Chapman (2002a; 2002b) who point out that we cannot necessarily assume that the construct of motivation is similar across different cultures. In Woodrow and Chapman’s study, two attributes called “performance goals” and “performance avoid goals” were investigated. “Performance goals are characterised by a focus on one’s self with an emphasis on performance relative to others and errors are viewed as failure” (2002b, p.259) whereas “[a] performance avoid goal orientation relates to the need to avoid appearing incompetent or performing worse than classmates (Elliot and Sheldon 1997; Middleton and Midgely 1997; Skaalvik 1997)” (p.259). Results do show differing motivations for different cultural/geographic groups. Students from China, Hong Kong and Taiwan (Chinese cultures) scored higher on performance goals than others (from South America, Europe and Vietnam). Students from other Asian countries scored in between. These same Chinese background students plus those from Thailand and Indonesia scored higher on performance avoid goals than others. Although the authors suggest here the impact of family expectations on the students, they hasten to add that these differences could also be attributable to other factors such as length of time in Australia and length of time studying English, which were not investigated.

Beliefs

As with other affective variables, beliefs are complex and influential. Burden (2002), for example, maintains that students’ judgements of the difficulty of a language are critical “to the development of expectations for and commitment to language learning” (p.3). The majority of Burden’s study participants believed that “they will not ultimately speak English well … and rated their own aptitude for English very poorly” (p.6) and were therefore reluctant to communicate with native English speakers. These students believed that an excellent accent was important and that they needed to persevere in spite of their errors, as practice was very important. Nonetheless they reported high integrative motivation and agreed that, if able to speak well, they would have many opportunities to integrate.

As with motivation, beliefs are also expected to change over time—that is, they are “dynamic” and “socially constructed” (Amuzie and Winnie 2009, p.376) and responsive to context. Amuzie and Winnie show that their students’ time studying abroad changed their beliefs about learner autonomy and the role of the teacher in particular. For successful learning therefore, teachers need to know what their students believe about their learning, as these beliefs may be dysfunctional and require modification. Similar changes in students’ belief systems, particularly in relation to learner autonomy, self-correction, and critical thinking were observed with entry into an Australian academic culture by Devine (1999). Devine stresses the centrality of teachers in the change process, although this impact has been questioned by Kern (1995).

According to Benson and Lor (1999), one’s beliefs about how to learn a language can determine one’s choices of learning strategies. For example, the belief “that the best way to learn a foreign language is to memorize its component parts” will result in “positive attitudes towards vocabulary and grammar learning” and a predisposition to using strategies of analysis, memorizing and practising. On the other hand, a belief “that the best way to learn a foreign language is to absorb it in natural contexts of use” will result in positive attitudes towards communicating with native speakers and a predisposition to use “a range of social and communication strategies” (p.459). Conversely learners can have “mistaken”, uninformed, or negative beliefs that may lead to a reliance on less effective strategies, resulting in a negative attitude towards learning” (after Victor and Lockhart 1995; Bernat and Gvozdenko 2005, p6 ).

Students who are positively disposed to new strategies show autonomous learning behaviour (Cotterall 1999). “Autonomy-fostering strategies” involve students knowing how to develop their own practice regimes, how to ask for help, and how to identify
their strengths and weaknesses (p.508). Among Cotterall’s cohort of students, monitoring strategies (i.e., measuring progress) and evaluating strategies (checking one’s own work) were the least used. The strategy of being able to correct one’s own work is one that differentiates effective and less effective learners (Hosenfeld 1977; Vann and Abraham 1990). Cotterall concludes that a learners’ use of a given strategy is inevitably associated with their knowledge of that strategy, their confidence to adopt it, their willingness to use it, and their acceptance of responsibility for adopting it” (1999, p.310).

Anxiety

Anxiety has been reported to hinder physical as well as emotional wellbeing. Von Worde’s (2003) foreign language students reported physical symptoms such as “headaches”; “clammy hands, cold fingers”; “shaking, sweating”; “pounding heart”; “tears”; “foot tapping, desk drumming”; “I clamp up, I get very tense and I start balling my fists”; “my stomach gets in knots”; “I get all red”; and “I get really tired” … Hiding from the teacher in one way or another was a common manifestation of anxiety” (p.7).

Foreign language anxiety in particular has been widely studied in the second language acquisition field, much of it influenced by the seminal work of Horwitz, Horwitz and Cope (1986). Speaking anxiety and subsequent negative evaluation by others feature strongly in this research area (see Woodrow and Chapman 2002a) and Aida (1994) suggests that instructors should make a point of lessening tension in the classroom and creating a supportive learning context where students’ fears of rejection can be alleviated. Brown (2008b) too suggests greater support to reduce language anxiety (see also Casado and Dereshiwsky 2001). Tsui (1996) attributes anxiety in the language classroom to teaching strategies (e.g., questioning techniques) and suggests the use of strategies to minimise this anxiety. Also foreign language anxiety is more likely to apply to students who have learnt their foreign language later in life (Dewaele 2007). In a subsequent study, Dewaele, Petrides and Furnham (2008) report on the effect of trait emotional intelligence (i.e., emotion-related dispositions and self-perceptions) and a range of socio-biographical variables on communicative anxiety in L1 and L2. They were able to link early second and third language learning with lower communicative anxiety. More frequent use, L2 social networks, and high self-perceptions of proficiency provided a similar result.

Horwitz (1995) describes language learning as an “ego-involving undertaking which involves a positive emotional stance” (p.573) where early negative experiences can result in a “lifetime of foreign language anxiety” (p.576), and Gregersen and Horwitz (2002) propose a link between anxiety and perfectionism (measured by reactions to personal performance standards, procrastination, fear of evaluation, and concern over errors). Ramirez (1999, cited by Gregerson & Horwitz, 2002, p.549) suggests overcoming the self-defeating impact of perfectionism by developing more realistic expectations (see also Brophy 1999), and Horwitz (1995) sees it as the teacher’s role to address the emotional needs of students as an instructional priority (p.573). Similarly, Williams and Andrade (2008) maintain that “teachers should be aware of anxiety-provoking situations and take steps to minimise their negative impact. At the same time, learners may benefit from being explicitly taught how to cope with these situations” (p.188).

As Yan and Horwitz (2008) point out, anxiety has generally been conceptualised as bidirectional (i.e., anxiety hinders achievement and lack of achievement increases anxiety). However their students reported a unidirectional impact: that anxiety affected their learning. Other factors linked to anxiety were comparison with peers (or “the environment and atmosphere resulting from peer competition and influence” (p.159)); learning strategies (“or the inability to find effective language learning strategies” (p.164)); and language learning interest (demonstrated favourable attitudes and concerns towards language learning (p.158)).
Appendix 4: Language Skill Proficiencies and Strategies

Reading Skills

Grabe (2004) reviews the teaching of reading in both L1 and L2 contexts and provides valuable advice on ways to enhance students’ reading fluency and understanding of discourse structures, namely:

[1]… ensure fluency in word recognition; (2) emphasise the learning of vocabulary; (3) activate background knowledge; (4) ensure acquisition of linguistic knowledge and general comprehension; (5) teach recognition of text structures and discourse organization; (6) promote development of strategic readers rather than mechanical application of strategy checklists; (7) build reading fluency and rate; (8) promote extensive reading; (9) develop intrinsic motivation for reading; and (10) contribute to a coherent curriculum for student learning. (p.44)

Maldoni, Kennelly and Davies (2009) describe the results from a discipline-based reading intervention program for international students, reporting improved learning outcomes for students in their first year of study. Using content material from students’ courses, the program introduced students to ‘top-down’ strategies to encourage them to look at the whole structure of a text (skimming, scanning, identifying main ideas, summary writing and discussion), as well as using a ‘bottom-up’ approach where they used strategies for word and sentence level comprehension. The program also required students to write and collaborate with other students in undertaking a deeper analysis and evaluation of the texts involved (p.6).

Reading is obviously enhanced by an adequate vocabulary which has meant that vocabulary acquisition features strongly in language learning skills research. The study of lexical inferencing—or guessing the meaning of a word from its context—and the subsequent retention of the word’s meaning has interested numerous scholars. Bengeleil and Paribakht (2004) for instance provide a thorough review of literature on lexical inferencing. In their own research, they observed that “L2 readers’ prior linguistic and non-linguistic knowledge sources interact with contextual cues in the text to help them arrive at a meaning for the unfamiliar lexical items” (p.139), however more advanced students made more correct inferences. Less skilled language learners tended to rely more on the context of the sentence itself which, in an extensive text such as that prescribed at university, may not be adequate. They conclude that exposure to new vocabulary in various contexts is usually needed for actual retention of a word meaning.

Laufer (1992) compares reading ability and general academic ability and shows that with a vocabulary level of less than 3000 word families, reading is not strengthened by general academic ability, whereas with a vocabulary level of 5000, reading ability is satisfactory regardless of academic ability. This suggests an L2 reading threshold of at least 3000 word families (Laufer 1996). Laufer (1997) investigates lexical guessing as a reading strategy and reports that poor readers’ lexical guessing is hindered by a lack of contextual clues or unhelpful and misleading clues, and the reader’s familiarity with the topic (i.e., his/her schema). Vocabulary development therefore is strongly linked to reading efficiency.

The importance of encountering a word in thematically related texts is also investigated by Paribakht and Wesche (1999) who achieved mixed results. Their advanced learners in a university context tended to draw most on “sentence-level grammatical knowledge” (p.214) but other important prompts for inferencing were word morphology, punctuation cues, and world knowledge, depending on the “individuals’ previous L2 learning experience, their L1, and their familiarity with the text topic” (p.214). However in follow-up think-aloud protocols, the learners in this study recalled only a few new words from the text and comprehension tasks and, more importantly, did not think that the process
helped their vocabulary acquisition. A more extensive discussion of the research on vocabulary acquisition is provided later in this section.

According to Schramm (2008) reading in a second language can be inhibited by the absence of words in the reader’s existing mental lexicon and of the necessary lexico-morphological knowledge to ascertain meaning from other derivative forms. Moreover, if reading in a new discipline or culture, the reader may not have the existing schemas to invoke to understand a text (see also Reid, Kirkpatrick et al. 1998; Kelly and Widin 2001; Bell 2008).

Koda (1996) reviews studies of L2 word recognition and reading comprehension and concludes that enhanced L2 processing skills (e.g., practice) improves word recognition and in turn reading comprehension, but that the orthographic conventions of the L1 (e.g., English compared with Arabic script or Japanese logographs) have an impact.

Quite apart from the role of vocabulary in reading comprehension is the need for the global understanding of the text: its original context, aim and audience and the relationships between propositions within the text. For a second language reader, rhetorical markers or text connectors (e.g., because, therefore, etc.) are necessary for understanding sentential relationships. However, expert writers very often make rhetorical moves (e.g., consequence, conclusion, etc.) implicit within the text. Important for the university student is the ability to distinguish fact and opinion when reading. These include rhetorical differences that are essential for understanding research papers and for developing critical literacy. Ghahraki and Sharifian (2005) show a positive correlation between the ability to determine fact from opinion and overall reading ability, but only among more advanced English L2 proficiency levels. Since this distinction is so fundamental to academic reading, it is somewhat surprising that it is not widely taught or recognised as a difficulty for many international students.

**Reading Strategies**

Reading strategies are particularly important for international students, particularly postgraduate students who find themselves required to read and synthesise extensive selections of academic texts and journal articles. Dictionary use features strongly in reading research, particularly research focusing on incidental vocabulary acquisition. As Knight (1994) observes, once students begin to “study literary texts instead of language texts, … the pedagogical assumption regarding vocabulary learning also shifts in emphasis from intentional to incidental. Vocabulary is no longer a primary classroom focus, something to be taught and tested; but rather, something to be acquired incidentally by the student while reading” (p.285). Knight notes that many educators discourage the use of dictionaries while reading as it disrupts the comprehension process, whereas she found that dictionary use did not affect comprehension, but it could slow it down. Low ability students however are at a disadvantage when required to guess meaning from context.

Vianty (2007) addresses the use of metacognitive reading strategies and compares in particular the use of analytic and pragmatic reading strategies (after Taraban, Rynearson et al. 2004) when reading in an L2 (English) and L1 (Bahasa Indonesia). Analytic strategies were employed when reading for comprehension. Pragmatic reading strategies were employed when reading for study and academic performance. Students reported using some pragmatic strategies more for reading in English (L2) than in Bahasa Indonesia (L1), these included: making notes when reading in order to remember the information; underlining and highlighting important information in order to find it more easily later on; writing questions and notes in the margin in order to better understand the text (glossing); and underlining when reading in order to remember the information. In contrast, when reading in their L1, students used more analytic strategies: they noted how hard or easy a text was to read; they inferred meaning from
the text when information critical to understanding was not directly stated; and they
evaluated the text to determine whether it contributed to their knowledge/understanding
of the subject. Somewhat surprising was the students’ greater use, when reading in the
L1, of the two pragmatic reading strategies: reading sections more than once; and re-
reading the whole text. Vianty (2007) attributes this to students’ more careful initial
reading of the English text, which obviated the need for re-reading.

Fotovatian and Shokrpour (2007) compared strategy use by good and poor readers of
English in Iran. Elaboration (i.e., linking new ideas to existing knowledge), recognizing
text structure, and directing attention showed a significant correlation with success
among the good readers, who also used more metacognitive strategies overall. Poor
readers used more “local, text-based and bottom up strategies” (p.57) such as re-
reading, seeking clarification, simplification, focusing on single words, looking up all
words, summarization (“intermittently synthesizing…to ensure that information has
been retained” (p.49)) and note-taking. Not surprisingly, Fotovatian and Shokrpour
showed that “some strategies were unknown to poor readers” (p.58).

Research findings of some concern are presented by Skyrme (2005), who notes
international students’ abandonment of preview reading before lectures because it is “a
waste of time” (p.3). Students found the readings too general and were unable to
extract enough meaning from the texts to link to the lecture material. “Lectures as a
consequence, were ‘incomprehensible’. Only after the first test did students see the
connection between lectures and textbook, and that a more careful reading of the text
to extract main ideas was required” (p.3). Reading was obviously a painstaking task for
these students, as one student explains his approach: first reading to find new words
and writing down meaning, second re-reading to try and grasp further meaning but still
with difficulty, and third re-reading to “fully integrate meaning into new understanding”
(p4) and to take notes. In the face of these difficulties, Skyrme’s interviewees still relied
on their L1 to record meaning and until they are able to “think about and remember
content and compose responses in English” (p.10) they would enhance “the quality of
their learning by their judicious use of L1” (p.10). In another comparison of reading
strategies used by L1 and L2 speakers at university by Tercanlioglu (2004), L1
students reported more frequent use of metacognitive strategies (i.e., “those
intentional, carefully planned techniques by which learners monitor or manage their
reading. Such strategies included having a purpose in mind, previewing the text as to its
length and organisation, or using typographical aids, tables and figures” (p.568))
Both the L1 and L2 groups however showed a clear preference for cognitive strategies.

The role and success of lexical processing during reading has been addressed
frequently in strategy research. Some scholars (e.g., De Bot, Paribakht et al. 1997)
have applied first language processing models to second language situations in
experiments that require subjects to read a passage and conduct a concurrent think-
aloud protocol explaining how they infer the meaning of a word. De Bot’s students drew
from their linguistic knowledge (syntactic and morphological), their punctuation
knowledge, world knowledge, and cognate knowledge. Other studies demonstrate
mixed results for vocabulary strategy use when reading. Subetki and Lawson’s (2007)
L2 postgraduate students were better at word recognition than at meaning translation
after reading and using a range of strategies. From think-aloud protocols it was
ascertained that approximately 45 per cent of students used passive dictionary and
repeated pronunciation strategies; around 30 per cent used contextual cues; the rest
used more complex strategies such as generating an image or analysing meaning.
Although the students relied on relatively shallow strategies, the frequency of this
strategy use was a significant predictor of word recognition and meaning translation.
Writing Skills

Obviously many of our international students come from cultures where writing conventions differ markedly. Indeed, Hinds (1987) proposed two types of writing cultures: those that are writer responsible and those that are reader responsible. In the former, it is the writer who is expected to make his/her text clear and comprehensible for the reader, whereas in the latter it is the readers’ responsibility to understand what is written. Hinds placed English into the first category, however many of the linguistic backgrounds from which our international students come fit into the second category, causing these students to sometimes see academic writing in English as simplistic and boring. Although a highly relevant distinction for students and staff to be aware of even today, subsequent research in this area addresses contrastive rhetoric (e.g. Golebiowski and Liddicoat 2002) and is not within the scope of this study.

The writing difficulties encountered on entering university at first year are even more severe when an international student initially arrives to commence post-graduate studies. Not only is the concept of robust, evidence-based research new for many, but the notion of writing a thesis is insurmountable for some and an anxiety-provoking event (Johanson 2001) for others. Bitchener and Basturkmen’s (2006) qualitative research with postgraduate research students demonstrates that many have a poor understanding of thesis structure, particularly the discussion section; a tendency to view difficulties in terms of sentence structure and grammatical accuracy rather than more broadly in terms of the rhetorical and organisational requirements of the genre of thesis writing; and a failure to acknowledge and incorporate the “big picture” of the related literature or the contribution of the thesis to the discipline. This view supports earlier work by Bush (1995) whose survey of faculty staff showed greater stress placed on content and argument than correctness of style.

Naturally the writing demands for graduate research students are greater than for undergraduate students which explains the higher English entry requirements for postgraduate study. However Kaldor and Rochecouste (2002) still see the need to distinguish between academic researchers’ writing (or expert writing) and student writing. They also distinguish between general and discipline specific writing and note that students may have difficulty with both. The structure of academic writing required of students has been widely addressed (Swales 1990; Swales 1998; Rochecouste 2005; e.g., Bitchener and Basturkmen 2006; Green 2007; Moore 2007) and links closely to students’ understanding of their responsibility for achieving clarity and coherence in their writing.

Additionally, the role of L1 interference (or transfer) in L2 writing has attracted a number of scholars (e.g., Dechert 1983; Bialystok 1990; Dordick 1996; Bhela 1999). Language learning begins with finding alternatives for what is already learned in the first language and this applies as much to text structure as it does to grammar and vocabulary. Only with increased L2 writing proficiency and exposure to target texts will the student generate more native-like L2 writing. We naturally expect our international students to have reached this stage in their L2 development, however many will have not had the bibliographical or technological resources to benefit from this exposure. The role of the World Wide Web is therefore also being addressed in writing research, very often in terms of its positive or negative effects (e.g. Stapleton 2005).

Plagiarism in student writing is of course an issue that has received enormous attention in higher education research and discussion, particularly as international student numbers have increased (see Holmes 2004; Kirkpatrick 2004; Handa and Power 2005; Marshall and Garry 2006; Bretag 2007; Abasi and Graves 2008; Maxwell, Curtis et al. 2008; McGowan and Lightbody 2008; Ouellette 2008). Inadequate English hinders international students’ comprehension of lecture and reading material and their participation in discussions, as well as tempting them to resort to plagiarism in lieu of
having adequate language skills to paraphrase and synthesise what they read. Bretag (2007) found that international students attributed their use of plagiarism to several factors: their poor English, “particularly the inability to manipulate complex, technical language” (p.15); advanced standing entry into a course which means that international students often commence their studies in Australia in second or third year where the written language requirements are much higher than they expected; and too much leniency by some lecturers who accept ‘cut and paste’ assignments. Some lecturers who participated in Bretag’s study felt pressure to pass students even in the face of obvious plagiarism and all of them referred to inadequate processes for addressing plagiarism which undermined their authority.

Marshall and Garry (2006) concluded from evidence collected in their research on plagiarism that “NESB students are looking for a simplifying rule that they can apply when using information from other sources” (p.34). They go on to outline an argument that implies that plagiarism by NESB students might arise from the techniques used to teach them English writing and that their development as writers should be regarded as a continuum:

   Treating such strategies as plagiarism is clearly at odds with the techniques used to teach students English writing, many of which use mechanistic approaches such as standardised paragraphs and structured writing (Gomez et al., 1996). The intention is that such strategies are stepping stones to more nuanced understandings of information use and fluency in English and academic writing, but it is clear that this is taking longer to develop in the cohort of students studied than might be desired. (p.34)

In order to alleviate the problems associated with the identification and punishment of plagiarism, Arkoudis (2006) suggests that lecturers and institutions should adopt an educative approach to plagiarism—explain referencing, support language learning, demonstrate/model paraphrasing of main ideas in readings or previous assignments, and set assignments that specifically ask students to evaluate and analyse ideas they have read (p.13). To this end, Belter and du Pre (2009) also propose the explicit teaching of appropriate attribution and compared two cohorts of students, one having completed an “academic integrity module” and one which had not. Some 25.8 per cent of papers submitted by the latter (control) group showed plagiarism, while plagiarism was detected in only 6.5 per cent of papers from the group which had done the academic integrity module. They conclude that most plagiarism occurs out of ignorance. Similarly, Power (2009) claims that understanding plagiarism requires an understanding of “what actually motivates them [students] to plagiarise and not plagiarise” (p.659). Song-Turner (2008) observed that not only do language problems, skill deficiencies and time constraints lead to plagiarism, so does the fact that “the very definition of plagiarism was actually not really very clear for the students” (p.49). Liebler (2008) discusses the emotional costs of dealing with plagiarism and suggests the resurrection of the oral exam, overlooking somewhat the time and expense involved in such a strategy with today’s large classes.

Nonetheless the current treatment of plagiarism in Australian universities is heavily criticised in the literature as being “too black and white” (Song-Turner 2008, p.49). Many advocate, like Song-Turner better formative education on plagiarism, a greater understanding of attitudes to expert texts in other cultures, and better support for those students who do plagiarise.

Writing Strategies

Strategies for writing are not represented highly in this area of research. This could be because of the trend away from traditional translation methods of language learning to the teaching of communicative competence or the communicative method. Durkin’s (2008) student interviews after a writing task showed that “the majority of students
Addressing the ongoing English language growth of international students

interviewed rejected full academic acculturation into Western norms of argumentation. They instead opted for a "Middle Way" that synthesises the traditional cultural academic values held by many East Asian students with those elements of Western academic norms that are perceived to be aligned with these" (p.38). This presents a challenge to our expectations as lecturers in western English medium universities which lead us to expect international students at some point to be fully conversant of and skilled in our academic practices.

Argumentation is addressed by many scholars who are concerned with the written output of their international students. Bush’s (1995) survey of academics for example showed that content and argument were the most important requirements in student writing (see also Ballard and Clanchy 1988). Moore’s (2007) study participants, lecturers in Accounting, identified what they consider ‘good’ and ‘bad’ features in NESB students' writing. Among the ‘good’ features were: evidence of reading the literature, engagement with the topic, critical and original thinking, and appropriate cohesion. So-called ‘bad’ writing reflected the absence of these features and also poor sentential and rhetorical structure. The lack of international students' preparedness for the required level of writing is addressed in numerous qualitative studies. For example, Johanson’s (2001) Taiwanese postgraduate students in the US felt inadequately prepared for the writing demands of their courses; saw academic writing as quite different from other writing; employed a range of strategies when preparing for writing; and found the process of writing anxiety-inducing.

The advent of large classes and the more prevalent use of group assessment brings into consideration the advantages and disadvantages of collaborative writing. Both Storch (2005) and Fortune and Fernandez del Ray (2003) observed that increased metalinguage and metalinguistic understanding of writing occurred through collaborative tasks. Swain (2001) maintains that collaborative tasks can also develop discussion about the content. These beneficial by-products of the collaborative process have often been termed language-related episodes (LREs) and are described by Jackson (after Swain and Lapkin 1998; 2001) as any dialogue which includes talk about language production, use or correction. Storch’s (2005) study of ESL group and pair work shows that collaboration enabled students “to interact on different aspects of writing” (p.168) and on the generation of ideas. Moreover students appreciated the opportunity “to discover ideas together and exposed them to different views” (p.168). Pairs also benefited from immediate and ongoing feedback available through the collaboration and produced texts with increased grammatical complexity and accuracy. Fortune and Fernandez del Ray (2003), also observed lengthier communication episodes and jointly negotiated words and forms or “form-focused metatalk” (p.1).

Large class sizes and heavier workloads have also heralded the implementation of the self-assessment of writing. Wei & Chen (2004) maintain that “[s]elf assessment encourages students to look critically and analytically at their writing and to take more responsibility for what they write. Being involved in the process of self-evaluation, the students are no longer simply passive recipients of feedback, but become active participants in evaluation” (p.10). Also “[t]he teacher’s feedback to student self-assessment, particularly to the problems that the writers have, provides another chance for teacher-student interaction and improves the quality of evaluation. Most importantly, teacher involvement allows a sense of safety and certainty and writers feel that help from the teacher is available” (p.11).

Listening Skills

International students from non-English speaking backgrounds find very soon after entering an Australian university that they need to improve their listening skills. Considerable research makes reference to their inability to comprehend lectures for several weeks or even months. For example, lecture comprehension was markedly low
for students in a study by Mulligan and Kirkpatrick (2000) with only one in ten NESB students indicating that they understood the content of lectures well and some 22 per cent indicating that had not understood much of the lecture at all. Difficulties arose in particular with meta-pragmatic signals that indicated a change in topic (e.g., physical movements or changes in the delivery mode). Although "[m]ore explicit verbal signals ("OK, right ..."; "So to conclude ..."; "In summary ..."; "Let's move on ..."; "The important point here ...") caused them fewer problems, NESB students were still significantly less likely than ESB students to identify them all or most of the time (NESB 23%; ESB 52") (p.317). Resulting from this difficulty was an inability to recognise the macrostructural organisation of the lecture material. These students also had difficulty with culturally specific references, such as references to sporting heroes or politics, and with metaphors and idioms. Similarly, humour was not always understood. Such misunderstandings can lead to misinterpretation of lectures (Vandergrift 2004), which Littlemore (2001) suggests are far more serious than simple non-understanding.

Flowerdew and Miller (1992) maintain that listening to lectures is a complex activity linked to note-taking and assimilating information with existing background knowledge. Unfortunately many international students find that they have to choose between active listening or taking notes in lectures—they can’t handle both. Mulligan and Kirkpatrick (2000) for instance found that, whilst the NESB students in their study felt only slightly less able than local students to take lecture notes that made sense to them later, they had little or no capacity to synthesise and mentally process what they were hearing at the time. Comprehension only came later, as they reviewed their notes (p.323). They were also significantly less able than local students to keep up with the lecture in terms of note-taking (p.321).

Miller’s (2009) ethnographic study of engineering students’ understandings of what helped their comprehension of lectures included well known strategies such as comprehensible language, lecturer handouts, more visuals, more explicit linking of the lecture to the handout information and body language to aid comprehension. Indeed Mulligan and Kirkpatrick’s (2000) participants felt the need for “lecturers to check students’ comprehension before they progressed, taking the time to explain key concepts, to paraphrase and simplify, and to avoid the use of jargon (or at least explain it)” (p.325). Miller cites Lemke’s (2000) considerations for improved lecturing such as “a) How many ways can I use to convey my message? b) How many literacies do the students need to be able to handle before they can make sense of my message? c) What level of language do students need to be able to comprehend? d) What culturally specific aspects of the lecture will be open or closed to the students?” (Miller 2009, p.26-7).

Listening Strategies

Successful listening demands the continual use of a range of concomitant strategies (Rost 1994) for comprehension to occur within a very short period of time. During that time the listener needs to both recognise the word and draw on schemas or existing background knowledge and the context of the situation to achieve full comprehension. “Only EFL learners equipped with skilled listening strategies can be expected to have skilled comprehension processes” (Chien and Wei 1998, p.67). For Mareschal (2002) “skilled listeners engage in a coordinated, systematic cycle of predicting, elaborating, inferencing, and monitoring based on global comprehension, world knowledge, and plausibility. Strategy deployment during comprehension is not a serial process” (cited in Vandergrift, Goh et al. 2006, p.542).

Vandergrift (2004) analyses the process of listening as either top-down or bottom-up. Top-down listening draws on existing knowledge, experience and schemas. With bottom-up listening, the listener builds up meaning with increasingly larger units. Although at the university level we expect students to employ the former, any
breakdown in comprehension or mismatch between the new content and existing schemas may trigger the listener to resort to bottom-up processing “to reconcile details with the schema” (p.6). These theories of processing support the view that prior reading before lectures is fundamental to understanding. Different processes are apparently used for different purposes. For example, if listening for specific detail, bottom-up processing will be used, but if wanting to understand the general idea of an oral text, then top-down processing will be used (Vandergrift 2007). Vidal’s (2003) study participants adequately understood main concepts in a lecture but found difficulty in capturing details such as examples or supporting ideas. What supported student comprehension of main ideas was their recurrence in the oral text, whereas examples and supporting ideas were rarely reiterated in the course of the lecture, so did not assimilated to part of their prior knowledge. Thus they relied on more prominent words and the schema activated through the main ideas they recognised in the lecture, to the detriment of “the possibility of other ideas complementing or partially contradicting these central issues in the text” (p.6). Vidal attributes this listening inadequacy to weak bottom-up processing: “their incapacity to fully identify relationships between concepts within the lecture hindered their full understanding of the overall development of the lecture discourse” (p.5).

Huang’s (2006) cohort of Chinese university students in the US reported least confidence in their speaking and listening skills and there was a significant difference in confidence between students who had been in the US for less than a year and those who had been there for more than one year, and between undergraduate and postgraduate students. Moreover some 92 per cent of participants reported some problems with understanding lectures. Jung (2003) shows the advantage of clear discourse signally cues in lectures. Those listeners who were able to identify these cues accurately recalled more main ideas and supporting ideas. Jung (after Camiciottoli 2004) also suggests the use of interactive discourse structuring, e.g., ‘First, let’s look at’ or ‘what I will do now is’ to alert listeners, especially L2 listeners, to changes in discourse direction.

Using Chinese learners of English, Chien and Wei (1998) tested the use of three categories of listening strategies: linguistic (e.g., attending to every word, translating etc); cognitive (predicting, confirming linking to previous knowledge, taking notes, etc); and extra-linguistic (e.g., being interested in the topic, observing body language, intonation, stress and pause; re-listening, and persevering). They found a significant relationship between strategy use and listening performance. More successful listeners used more strategies from all three categories simultaneously. Several strategies in each category were identified as inhibiting a good understanding, and progression from using linguistic strategies to using cognitive strategies was seen as necessary for improved listening, thus identifying the teaching of cognitive strategies as advantageous for low-skilled listeners. Similar needs for low-ability listeners were found by Goh (1998). Both her high- and low-ability listeners reported using cognitive strategies, but her low-ability group were less skilled at using them. The low-ability group also used markedly fewer metacognitive listening strategies.

The relationship between motivation and strategy use has also been investigated and particularly that between motivation, metacognitive listening strategies and listening proficiency (Vandergrift 2005). Vandergrift’s results showed a greater strategy use among participants who reported more motivational intensity, and listening proficiency correlated negatively with a-motivation. Vandergrift describes this negative correlation as unsurprising “[s]ince amotivated students see no relation between their actions and subsequent consequences” (p.83).

Further work by Vandergrift, Goh, Mareschal and Tafaghotdari (2006) used the Metacognitive Awareness Listening Questionnaire (MALQ), which students can use to self-assess and to map their development in listening over time. Experimentation with
the MALQ showed emergence of five of their twenty-one strategies as important for listening proficiency: problem-solving (i.e., using experience and prior knowledge), planning and evaluation (recalling similar listening texts prior to the event), (no) mental translation (translating key words), person knowledge (perceived difficulty level), and directed attention (refocusing after loss of concentration).

**Speaking Skills**

The lack of social contact and interaction with local Australian students is of concern, since many students envisage that studying in another country will enable them to make friends in that country (Malcolm and McGregor 1995). Over a decade after Malcolm and MacGregor, these issues are still being investigated: for example, Rosenthal et al (Rosenthal, Russell et al. 2006) found that close to one third of international students had no social contact with Australians on campus and 39.4 per cent had none outside university (cited in Fegan 2008, p.21). As a result “[i]nternational students may find that their foreign study experience is socially dysfunctional, and their aspirations to become more conversationally adept in English are stymied because the opportunities to speak English tend to be limited to conversations with other international students. Thus, they miss out on acquiring English as it is spoken by Australian natives, with its colloquialisms, idioms, slang, ironic asides, chit chats and subtle nuances” (Fegan 2008, p.22).

Speaking is also inhibited by a fear of making errors and subsequent loss of face in the social or tutorial context, in what Lee (2007) calls “self-perceived English language articulation” (p.41). For some students however, good communication skills are essential to the profession (e.g., medicine, pharmacy, psychology). Stupans, Rao, March and Elliot (2008) compared pharmacy students who had and had not passed their English comprehension test and found markedly different attitudes towards the strategies they use to development their English. Students who passed the English comprehension test were more likely to share accommodation with students from different language backgrounds, speak to other students in the pharmacy program, read more English language books and newspapers, and watch more English language television. This group was also more confident about talking to local Australian students.

An extensive, although not recent, discussion on non-native English speaking students’ oral participation in academic discussion is that of Jones (1999). Jones concludes surprisingly that cultural background is equal or even more likely to be the cause of reticence or silence than language difficulty or shyness. Cultural difference is responsible for two important characteristics of group discussion: the “ethos of informality and its discourse norms” (p.257). Jones suggests that “many NNSs would find the interactive vigour of the tutorial or seminar, its atmosphere of solidarity and informal student-teacher rapport, very strange and disorientating, and they would be unsure of how one can learn in such a setting” (p.257). These students would also have difficulty with the conventions of turn-taking, paralinguistic conversational strategies (e.g., intonation patterns and pauses), and body language.

Clearly, oral language development and verbal participation is closely linked to social integration (as seen above), motivation and anxiety, and to strategy use. Hence the topic of oral language will be taken up again in subsequent sections of this section.

**Speaking Strategies**

Strategies for speaking or oral communication are frequently categorised under communication strategies in second language research. Paramasivan (2009) explains that a communication strategy “is used to solve problems in the planning and realisation of speech production” (p.198). Included in communication strategies are reduction strategies such as “avoidance” and “Omission” and achievement strategies
such as “code-switching”, “translation”, “restructuring”, “circumlocution”, and “word coinage” (p.198). A communication strategy can therefore function simply to enhance clarity or it can function as a learning strategy, in that it helps learners to expand their second language repertoire (p.192). (See below for a review of research on vocabulary development.)

Dornyei (1995) discusses the teaching of communication strategies, which he maintains involves the following procedures: alerting learners to their existing strategies and appropriate use; encouraging risk-taking; providing models and observing what native speakers do when they listen; highlighting cross-cultural differences; using tasks to verbalise (e.g., think-aloud protocols); and providing practice opportunities. Training can also involve strategies themselves such as compensatory strategies (e.g., gestures, fillers, circumlocution, approximations, code-switching, asking for help). A later publication by Dornyei and Scott (1997) provides a useful review of taxonomies of communication strategies, including those developed by Tarone (1977; Tarone 1980), Faerch and Kasper (1983), Bialystok (1983; Bialystok 1990), Paribakht (1985), Willems (1987), Poulisse (1993), and Dornyei and Scott (1995).

Vocabulary Skills

Vocabulary for conversation

Developing an adequate vocabulary for day-to-day conversation, although a fundamental necessity for international students, does not prepare them for university study. As Corson (1997) and many others (e.g., Kaldor and Rochecouste 2002) have pointed out, the further development of general academic and discipline specific vocabulary can cause a lexical bar (Corson 1997) for many students, hindering both their reading and subsequent writing. Daily conversation for example requires knowledge of 3,000 spoken word families, “[f]urthermore, to match the lexicon of a native university graduate, a vocabulary size approaching 20,000 word families is needed (Goulden et al., 1990)” (Tseng, Dornyei et al. 2006, p.86). Carter (1987) estimates that language learners would have to learn 1,000 new word families every year to reach the level of an educated speaker of English. Obviously, ongoing English language growth in the higher education context will need to include considerable vocabulary enlargement.

Reading and vocabulary acquisition

The role of reading in vocabulary acquisition has been discussed extensively in the literature as seen in the section on reading above, and the impact on vocabulary retention as a result of simply reading is questioned by many. This type of lexical learning is called incidental learning, which can be enhanced with associated tasks that direct attention at unknown words (see Parry 1993; Joe 1995; Newton 1995; Parry 1997; Paribakht and Wesche 1999). Huckin and Coady (1999) provide an extensive review of research on incidental vocabulary learning. The role of lexical inferencing, also discussed above in relation to reading, is also relevant for vocabulary acquisition. Paribakht and Wesche (1999) report that when reading, their L2 learners’ most common vocabulary strategy was inferencing, after which they would attempt to retrieve word meaning from phonetic or graphic cues, or they would ask for help. However, approximately half of the unknown words in the text were ignored—being deemed not important for the task at hand—which clearly demonstrated a strategic approach to reading.

Laufer (2001) suggests that reading “is not necessarily the main, nor the best, source of vocabulary learning in a second or foreign language” (p.52). After all, reading is generally a situation where little or no effort is made to commit any specific meaning to memory. Laufer (2003) goes on to challenge some basic assumptions about the value of reading for vocabulary improvement, maintaining that focused vocabulary tasks are
more effective. She maintains that a hypothesis of involvement (after Laufer and Hulstijn 2001) is required to successfully retain new vocabulary. Within this concept of involvement are three broad components: need (the motivational dimension); search (the activity of finding out meaning) and evaluation (the decision about its use and context). “A real-life communicative situation, or a teacher-designed learning task, can induce any one, two or all three of the components of involvement for each word” (Laufer 2001, p.51) and when combined will produce more successful vocabulary learning. The value of vocabulary tasks is also supported by Wesche and Paribakht (2000), whose empirical research shows better results when learners carry out tasks with new words that they encounter. “Tasks provide learners with varied & multiple encounters with given words that highlight different lexical features, promoting elaboration & strengthening of different aspects of word knowledge” (p.196). Research into the benefit of reading for incidental vocabulary acquisition is placed in considerable doubt with these studies.

Fraser (1999) investigated the impact of instruction in lexical processing strategies (such as inferring and consulting) on incidental vocabulary growth while reading. Not surprisingly, inferencing and consulting (a dictionary) were more productive for vocabulary learning than ignoring a word, but the number of ignored words also decreased as success in inferencing increased. However, problems did arise for participants with inferencing causing some fluctuating results: the number of shared cognates (between French and English in this case) led to misleading associations. The mean retention rate of new vocabulary was 28 per cent, somewhat higher than earlier studies (e.g., Krashen 1989; Hulstijn 1992; Paribakht and Wesche 1997). The combination of the lexical processing strategies such as inferring the meaning of a word with existing L1 or L2 associations resulted in higher retention rates, as did the combination of inferencing and consulting.

Vocabulary Strategies

Vocabulary learning strategies attract numerous scholars, many of whom have developed vocabulary learning strategy inventories or taxonomies which are thoroughly discussed in Segler, Pain and Sorace (2002). Among these are Oxford’s (1990) Vocabulary Learning Strategies list with four major categories; Stoffer’s (1995) Vocabulary Learning Strategy Inventory containing 53 items; and Schmitt’s (1997) taxonomy with 58 items. Oxford’s (1990) four categories include social (e.g., asking for meaning); memory (e.g., memorizing); cognitive (e.g., making lists, labels etc); and metacognitive (e.g., self-testing, etc). A fifth category entitled determination (e.g., guessing) was added by Schmitt (1997). Nation (1990) also proposed discovery (e.g., initial encounter with a word) and consolidation (i.e., remembering). Further to this is the notion of Depth of Processing (Craik and Lockhart 1972), which indicates greater semantic involvement with a word and leads to better long-term memory retention.

An extensive project on vocabulary learning has been conducted by Fan (2003) in Hong Kong. Fan’s subjects, who were identified as good language learners, favoured using dictionaries, recalling a known word, guessing, and managing sources for finding new words, over repetition strategies. Kudo (1999) tested Oxford’s (1990) four categories of strategies and found results from Japanese students to be consistent with those of Oxford’s students in the US. Kudo found a preference among this Japanese cohort for cognitively shallow strategies such as verbal repetition, as opposed to the cognitively demanding keyword (mnemonic) strategy.

Akbari and Tahririan (2009) report no differences in strategy use for specialised or non-specialised vocabulary among their Iranian students. They observed that the most common comprehension strategy was a bilingual dictionary and, contrary to the above, the most frequent learning strategy was oral or written repetition. In addition, more concerted efforts in vocabulary improvement beyond repetition were made by more
motivated students, i.e., those planning postgraduate study or those seeing prestige attached to speaking English.

Moir and Nation’s (2002) international student cohort favoured a consolidation strategy which involves re-reading vocabulary lists and even copying them out, even though they had been introduced to more effective strategies (e.g., guessing from context, word cards, mnemonics, word parts, and using dictionaries). They also found that “[m]any learners also did not appreciate that knowing a word involves much more than being able to recognise its form and connect it to a meaning” (p.31), for example its co-occurrence relationships and collocations (i.e., the words and grammatical structures with which it most often occurs).

Gu and Johnson’s (1996) study of Beijing university students’ English vocabulary skills and proficiency showed that rote memorisation did not feature strongly in their strategies. Instead the most proficient students with the highest vocabulary skills engaged in reading and extra-curricular activities. The specific metacognitive activities supporting this success were self-initiation and selective attention (e.g., focusing on or planning to listen for specific key-words). Cognitive activities that correlated positively with proficiency included guessing from context, skilful dictionary use, note-taking, attending to word formation, and the intentional use of new words. Interestingly, oral repetition correlated with general proficiency, while visual repetition (e.g., re-reading lists) was “the strongest negative predictor of both vocabulary size and general proficiency” (p.668).

**Vocabulary Learning and Dictionary Use**

An important strategy for building one’s vocabulary is of course using a dictionary and a number of researchers have studied dictionary use in terms of successful searches and the impact on long term word retention. Nesi and Haill (2002) for instance, found that international university students lacked skills in selecting the appropriate entry/definition for a word resulting “in serious errors of interpretation” (p.277), or what the authors call “look-up failure” (p.299). Miller (2005) notes that students prefer bilingual dictionaries and therefore do not benefit from the explanatory examples provided in learners’ dictionaries. This is in spite of the students frequently experiencing inadequacies with bilingual dictionaries for assisting with productive word use. Miller found that her international student cohort at an Australian university had little prior knowledge of learners’ dictionaries and their benefits. A similar marked preference for bilingual rather than monolingual support resources has also been observed by Frankenberg-Garcia (2005).