English Language Proficiency in Higher Education: Student Conceptualisations and Outcomes

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Statement of originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Pamela Humphreys
September 2015
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The more I live, the more I learn. The more I learn, the more I realize, the less I know.
— Michel Legrand

What we know is a drop; what we don’t know is an ocean.
— Isaac Newton
<table>
<thead>
<tr>
<th>Acronym/Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACTFL</td>
<td>American Council of the Teaching of Foreign Languages</td>
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<td>AEL</td>
<td>Arts, Education, Law Group</td>
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<tr>
<td>AELP</td>
<td>Academic English Language Proficiency</td>
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<td>ALL</td>
<td>Academic Language &amp; Learning</td>
</tr>
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<td>AUQA</td>
<td>Australian Universities Quality Agency</td>
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<tr>
<td>BICS</td>
<td>Basic Interpersonal Communication Skills</td>
</tr>
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<td>CALP</td>
<td>Cognitive Academic Language Proficiency</td>
</tr>
<tr>
<td>CEFR</td>
<td>Common European Framework of Reference</td>
</tr>
<tr>
<td>DEEWR</td>
<td>Department of Education Employment and Workplace Relations</td>
</tr>
<tr>
<td>DEP</td>
<td>Direct Entry Program</td>
</tr>
<tr>
<td>DIAC</td>
<td>Department of Immigration and Citizenship (former name)</td>
</tr>
<tr>
<td>DIBP</td>
<td>Department of Immigration and Border Protection (current name)</td>
</tr>
<tr>
<td>EAL</td>
<td>English as an Additional Language</td>
</tr>
<tr>
<td>EAP</td>
<td>English for Academic Purposes</td>
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<tr>
<td>EFL</td>
<td>English as a Foreign Language</td>
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<td>ELP</td>
<td>English Language Proficiency</td>
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<td>ELSHE</td>
<td>English Language Standards for Higher Education</td>
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<tr>
<td>ELT</td>
<td>English Language Teaching</td>
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<td>EMI</td>
<td>English Medium of Instruction</td>
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<td>ESL</td>
<td>English as a Second Language</td>
</tr>
<tr>
<td>GBS</td>
<td>Griffith Business School</td>
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<tr>
<td>GPA</td>
<td>Grade Point Average</td>
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<tr>
<td>GPP</td>
<td>Good Practice Principle</td>
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<tr>
<td>IEAA</td>
<td>International Education Association of Australia</td>
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<tr>
<td>IELTS</td>
<td>International English Language Testing System</td>
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<tr>
<td>ISLPR</td>
<td>International Second Language Proficiency Rating</td>
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<tr>
<td>LI/L2</td>
<td>First language/second language</td>
</tr>
<tr>
<td>LOI</td>
<td>Language of Instruction</td>
</tr>
<tr>
<td>PP</td>
<td>(University) Pathway Partner</td>
</tr>
<tr>
<td>PTE</td>
<td>Pearson Test of English (Academic)</td>
</tr>
<tr>
<td>SEET</td>
<td>Science, Environment, Engineering, Technology Group</td>
</tr>
<tr>
<td>SLA</td>
<td>Second Language Acquisition</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
</tr>
<tr>
<td>TEQSA</td>
<td>Tertiary Education Quality Standards Agency</td>
</tr>
<tr>
<td>TESOL</td>
<td>Teaching English to Speakers of Other Languages</td>
</tr>
<tr>
<td>TOEFL iBT</td>
<td>Test of English as a Foreign Language (Internet-based Test)</td>
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Abstract

In recent years, the growing number of students with English as an Additional Language (EAL) in higher education around the world - and specifically in traditional English-speaking contexts - has led to a focus on their English language proficiency (ELP). Much of the scholarly literature on the topic has drawn on expert opinions rather than the views of students themselves. Students have been treated as ‘objects of study’ rather than as ‘subjects of study’ in their own right. Student conceptualisations of ELP, which lie at the core of this thesis, are examined and analysed with respect to key variables in order to investigate whether there is any systematic variability in them, and then compared with measurable graduating outcomes. The study also compares student views with policy discourse and the theorisation of ELP in order to ascertain the degree of convergence, and to consider implications for policy and practice. In this way, the study aims to provide empirical evidence to progress what is known about the construct of ELP in the higher education context.

Undergraduate EAL students’ conceptualisations of the construct of ELP in higher education were first explored via multiple focus groups (n = 37), which subsequently informed the design of a large-scale survey (n = 281). These conceptualisations were analysed for any systematic variability based on gender, first language, academic group (i.e. broad discipline), entry pathway to the University, and stage of degree. Next, the graduating language proficiency test scores and academic of a large cohort of undergraduate EAL students (as measured by Point Average and IELTS Academic) were analysed (n = 564), and systematic variability in those scores was explored in relation to first language, academic group, entry pathway and reason for taking exit test. The findings related to student conceptualisations and outcomes were subsequently integrated in order to investigate the
to which there was convergence between the findings, policy discourse and the theoretical models.

Key findings are that students value English proficiency for their studies and beyond graduation. They report that the responsibility for developing ELP resides largely with them, and indicate being motivated to improve. Stage of degree was found to have an effect on motivation levels, with identifiable critical periods being first and penultimate semester of undergraduate study. First language emerged as a key variable in relation to both student conceptualisations and outcomes: students with language backgrounds typologically distant from English reported greater challenges with ELP but also higher levels of motivation to improve. These same first language groups obtained lower IELTS (Academic) scores than other language groups, although this pattern was not repeated in the academic outcomes. A further critical finding was the importance of linguistic competence for academic success and beyond, with ELP functioning as a conduit to academic success, though not the only necessary attribute.

Capitalising on these findings, implications are considered, and pragmatic recommendations made for higher education institutions interested in addressing issues related to the ELP outcomes of EAL students. The study shows that institutions should avoid stereotyping the EAL international cohort, but might legitimately target those who are more likely to face a higher degree of challenge. Importantly, the heuristic for ELP in higher education provided in the concluding chapter offers an important theoretical contribution to the field at a time when few extant models exist and the construct of ELP in higher education remains somewhat under-theorised. Uses for the heuristic are suggested for higher education stakeholders, including academic language specialists. Together, the outcomes of this thesis present opportunities for optimising the ELP of EAL university students.
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Chapter 1: Background and context

1.1 The global higher education market

1.1.1 Thesis

In recent years, there has been considerable discussion about the English language proficiency (ELP) of students with English as an Additional Language (EAL) in higher education, especially in English-speaking contexts such as Australia. Much of this debate has drawn on expert opinions rather than examining the views of the students themselves, arguably due in part to the belief that, as non-experts, students would find it challenging to articulate such conceptualisations. For this reason, EAL students have generally remained the ‘object of study’. Research which does draw on their views has tended to focus on experiences of adjustment, acculturative stress, and affective factors impacting the EAL student sojourn or on metacognitive matters such as strategies adopted, and relatively little has involved students in discussions centring on language itself. This thesis was therefore motivated by the desire to make the first order stakeholder the ‘subject of study’ by investigating student conceptualisations of the central construct of ELP in higher education, while relating the findings to measurable outcomes and theorisation in the field.

This chapter provides the background to the study by contextualising English as a Medium of Instruction (EMI) in the higher education discourse generally, and specifically in the Australian context.

1.1.2 The growth of higher education globally

According to reports by the Organisation for Economic Co-operation and Development (OECD, 2012, 2014), the transformation of world economies recent decades is due to two key events: the ascent of the knowledge and the exponential growth of higher education globally. One reason for this increase in tertiary enrolments is due to the potential for improved job
prospects and social opportunity (Dunworth, 2001; Education Intelligence 2015a, 2015b; EF, 2014; Marginson, 1993, 2011). OECD data evidences the relative earnings of tertiary-educated adults, which is one and a half times of adults who hold secondary school qualifications on average (OECD, 2013). During the recent Global Financial Crisis (GFC), the gap in income level of education widened.

Since the Middle Ages, higher education has played a role in growing science and scholarship through free academic mobility (Walker, 2014), but it is the twenty-first century that has witnessed the greatest increase in transnational student mobility. In the period 2000 to 2010, the number of foreign students worldwide increased by a staggering 99%, and four and a half million tertiary students were enrolled in institutions outside of their country of citizenship by 2012 (OECD, 2014). A doubling of this figure is projected by 2020 (Forest & Altbach, 2006). Research also indicates that global student mobility mirrors inter- and intra-regional migration patterns (Gribble & Blackmore, 2012; Hawthorne & To, 2014; Robertson, 2011), and immigration considerations play a role in the choice of study location (Hawthorne & To, 2014; OECD, 2013). In sum, higher education provides the likelihood of a higher salary, improved job prospects and increased potential for mobility and, as a result, it has become a marketised and global commodity (Coleman, 2006; Hawthorne & To, 2014; Marginson, 2011). As Wachter and Maiworm pragmatically declare: “like it or not, there is a global higher education market” (2008, p.15).

1.1.3 The proliferation of English Medium Instruction (EMI)
The spread of English is well-documented (Crystal, 1997; Graddol, 2006; Pennycook, 2004; Phillipson 1992, 2003, 2009a, 2009b) and it is now acknowledged as the dominant language worldwide (Doiz, Lasagabaster & Sierra, 2013), enjoying maximum influence from its ‘linguistic capital’ (Bourdieu, 1991). Whilst the desirability of this growth is contentious and debated (Brutt-Griffler, 2002; Canagarajah, 2007; Coleman, 2006; Crystal,
1997; Li, 2002, 2013; Pennycook, 2007, Skutnabb-Kangas, 1988; Spolsky, 2004; Swales, 1997), it has resulted in English being adopted as an *lingua franca* in higher education (Rigg, 2013). As Brumfit asserts, “language is intricately bound up in the higher education enterprise” (2004, p.164) and “for the first time, *all* the known world has a second language for advanced education” (2004, p.166).

The increased demand for higher education and the use of English in the sector have resulted in many countries actively shifting to adopt EMI: some due to historical (colonial) reasons, such as Hong Kong, and others in order to develop an élite population that can take an active role in global trade and diplomacy, such as China (McKay, 2014). Key drivers for this accelerating trend include the potential to attract a fee-paying market, internationalisation, economic development, national and social cohesion, and to develop human capital (Coleman, 2006; Dalton-Puffer, 2012; Dang, Nguyen & Le, 2013; Dearden, 2014; Doiz et al., 2013; Hamid, Nguyen & Baldauf, 2013; Hawthorne & To, 2014; Wachter & Maiworm, 2008; Wilkins & Urbanovic, 2014).

As well as the economic imperative, higher education has also long been viewed as an opening wedge for further influence by governments in English-speaking countries, particularly by the US and UK since World War II. American organisations such as the Ford Foundation have long funded higher education institutions abroad for this purpose, for example (2009b). Similarly, in the UK, the British Council has promoted British interests through cultural ties and English Language Teaching (ELT) since the nineteen forties, and in the last few decades the organisation’s function has shifted to explicitly include the recruitment of international students to British universities. It has been said that Thatcher’s “neo-con Keynesian policy on international students was unequivocally ideological”, viewing British higher education as “a marketable asset” (Walker, 2014, p.331). A generation later in 1999, the Prime Minister’s Initiative launched by Blair
also actively planned to increase Britain’s share of the global market of international students by 8% per annum (Phillipson, 2009a; Walker, 2014). Recent years, the US, the UK and Australia in particular have also capitalised on the influence and economic advantage that establishing satellite of their universities off-shore might bring, such as Carnegie Mellon University in Qatar (USA), the University of Nottingham Malaysia campus (UK), and the University of Wollongong in Dubai (Australia). All of these institutions deliver English-only degrees, in what is variously referred to as “borderless education, transnational, collaborative, or offshoring” (Walker, 2014, p.339), and there is even a body in the UK called the Observatory on Borderless Higher Education (OBHE, 2015). Lawton and Katsomitros’ (2012) audit identified over 220 international branch campuses globally, mainly by Anglophone countries, and some commentators have described it as “an educational gold rush” (Wilkins & Urbanovic, 2014, p.406).

In addition to traditional Anglophone countries, EMI is also a growing phenomenon in higher education institutions in the Expanding Circle (Kachru, 1982) or Periphery countries (Dang, et al., 2013; Dearden, 2014; Phillipson, 2009; Taguchi, 2014), that is, where English is not the domestic official language. Driven in Europe largely by the Bologna Process Declaration, 1999), the drive for internationalisation has resulted in the privileging of EMI in higher education over instruction in local languages (Coleman, 2006; Phillipson, 2009a). Internationalisation and EMI are seen inextricably linked in numerous contexts (Kirkpatrick, 2011) and the provision of courses, modules and/or entire degree programs in English has increased considerably in recent years in Europe (Dalton-Puffer, 2012; Dearden, 2014; Doiz, Lasagabaster & Sierra, 2011; 2013; Jenkins, 2014; Wilkinson, 2013). This is evidenced in Wachter and Maiworm’s (2008) large-scale study on behalf of the European Commission, which surveyed over four hundred higher education institutions in twenty-seven non-Anglophone European countries. They found a 340% increase in the number of undergraduate and postgraduate coursework programs taught
entirely in English between the years 2002 and 2007, and more than half of these 2400 programs had been set up in the previous two years. This rapid Englishisation of higher education is particularly prevalent in northern Europe (Coleman, 2006) such as in the five Nordic countries and the Netherlands, where its position is expected to strengthen further (Wachter & Maiworm, 2008; Wilkinson, 2013).

In Asia, too, many universities have adopted English as the medium of instruction. Singapore has offered EMI-only degrees for several decades while China, Korea, Malaysia, Hong Kong and the Philippines have all increased their EMI provision at university level (Kirkpatrick, 2014, in preparation). Decisions taken at the Asia-Pacific Economic Cooperation (APEC) summit in 2012 to improve academic staff and student mobility in a Bologna-like process are expected to continue the trend towards EMI offerings (Kirkpatrick, 2014). China has been actively promoting EMI for past decade, now requiring 5-10% of its undergraduate specialisation be taught in English or another foreign language (Lei & Hu, 2014). EMI has been embraced enthusiastically by universities across China and there are grand plans, such as the development of Zhejiang University (Times Higher Education, 2013), scheduled for completion in 2016, and where the on-campus working language will be English. China has also allowed the establishment of Western university campuses, which operate in English (Pessoa, Miller & Kaufer, 2014). Malaysia has a goal to attract 200,000 international students annually by 2020 and has implemented new measures to raise ELP levels in higher education. Even Japan appears to be attempting to embrace EMI via the launch of the Global 30 project (2015), aiming to offer EMI-only degrees in thirty institutions by 2020 in a bid to internationalise and attract foreign students. An English-only policy for English classes was also fully implemented in Japanese senior high schools 2013 (Hashimoto, 2013). Like Europe, the main goal in Asia is to attract foreign students (Kirkpatrick, 2014). However, EMI policy enactment is not always welcomed by students or faculty, as evidenced by the recent
controversy at the Chinese University of Hong Kong, which led to the loss a four-year legal battle for a student insisting that Chinese language of instruction was a requirement under the University’s charter (Li, 2013). The suicide of a Korean academic - allegedly due to stress related to an EMI policy - is an extreme case in point (Piller & Cho, 2013). In some governments are reversing their EMI policies, especially in the primary sector, such as in Indonesia (Hashimoto, 2013).

Other areas of the world are experiencing similar if less widespread shifts towards EMI in higher education. Africa, for reasons of prestige, has adopted English as its academic lingua franca. Afrikaans is being used less and less in South African higher education despite this hampering access to tertiary education as a result (van Wyk, 2014), and no African university uses its indigenous languages as the language of instruction (Leibowitz, 2004; Phillipson, 2009b; Shohamy, 2013; van der Walt & Kidd, 2013). Israel is an example in the Middle East where, despite the medium of instruction being Hebrew, most course readings are in English and there are increasing moves towards EMI (Inbar-Lourie & Donitsa-Schmidt, 2013). Qatar has invested heavily in EMI, having established six campuses of Western universities at its Education City, for example (Pessoa et al., 2014), and the UAE has the most overseas universities at thirty-seven (Wilkins & Urbanovic, 2014). In all, over two thirds of the fifty-five countries surveyed globally by Dearden (2014) were of the opinion that the growth of EMI would be a future trend. This is particularly so at the postgraduate level (Education Intelligence, 2014), and especially in the disciplines of engineering, management, maths, sciences, social sciences and business (Dearden, 2014).

The literature cites numerous challenges in tertiary EMI contexts and such policy decisions are clearly not value-neutral. Faculty staff, for example, are impacted due to demands on their own linguistic competence and the pedagogical implications of delivering content outside of their L1 (Ball & Lindsay, 2013; Coleman, 2006; Dearden, 2014; Mauranen, 2009). The
prevailing use of English for research and scholarship (Dalton-Puffer, particularly in disciplines such as the natural sciences, technology and medicine (Li, 2013; Phillipson, 2003), places further pressure on faculty members to develop their English proficiency, and there is concern that this will lead to domain loss and a potential negative impact on bi/multilingualism, with other languages becoming restricted to less prestigious contexts of use (Doiz et al., 2013, Wilkinson, 2013). There are also questions around student achievement of academic content as a result of inadequate Cognitive Academic Language Proficiency (CALP) (Doiz et al., 2013). There is some indication that EMI makes no statistically significant difference to linguistic outcomes as evidenced by Lei & Hu’s (2014) comparison of EMI and CMI (Chinese Medium of Instruction) undergraduates in China, a finding which they suggest nullifies absolutist claims as to its benefits. There is a suggestion of lower outcomes when assessment is not in the L1 (Shohamy, 2013; van der Walt & Kidd, 2013; Wilkinson, Zegers, & van Leewen, 2006). Evidently, not everyone is convinced of the positive impact of the unmanaged expansion of English in higher education. Unplanned outcomes are said to weigh heavier than planned changes, and the disparity between policy and practice in EMI implementation is noted in the literature (Hamid et al., 2013; Hashimoto, 2013). As Spolsky said, “English as a global language is now a factor that needs to be taken into account in its language policy by any nation state” (2000, p.6), but some believe that many lack the capacity to effectively deal with it (Dang et al., 2013). Indeed, Kirkpatrick (2014) states that while most Asian universities have accepted that they need to provide EMI courses if they want to raise their international profile, few have developed the policies that need to go hand in hand with such a decision, a view consistent with that of Kaplan & Baldauf from an earlier decade (1997).

Despite calls to give it critical consideration, numerous perceived benefits of EMI also exist for the institutions as well as for individuals (Dearden, 2014; Educational Intelligence, 2014), and the pragmatic value should not be
ignored. For the institution, there is evidence that EMI supports the quest to be global/international/multilingual, and may convey considerable economic benefit as well as prestige. EMI provision has been found to positively the quality of institutions in numerous ways: for example, as a by-product of external accreditation (Wachter & Maiworm, 2008). By the students, an degree is widely perceived as an indispensable asset and a catalyst towards personal goals such as upward and/or outward mobility, allowing them to acquire “global linguistic competence to articulate their identity in the international community” (Taguchi, 2014, p.91) as they prepare to become global citizens in a transnational society. As many nations currently have insufficient capacity in their tertiary systems, and the burgeoning middle classes have the disposable income to invest in tertiary education overseas (Education Intelligence, 2014; Walker, 2014), this could be viewed as a win-win. Ironically, the criticism levelled against the expansion of English higher education is often made by those who are themselves ‘native or functionally bilingual in English, who have enjoyed the privileges that an advanced proficiency in English provides, and who invariably make their living from teaching or researching in English, including publishing in élite high-ranking English journals. While critical evaluation is crucial, scholars need to be cognisant of the social advantage that an EMI degree can engender.

### 1.1.4 Global international student enrolments

The increasing demand for a tertiary education in an EMI context is dramatically impacting global international student enrolments. Core Anglophone countries have understandably benefitted most from this preference. These countries include the UK, the USA, Australia, Canada and New Zealand, and correspond to Kachru’s classification of the ‘Inner (Kachru, 1982), to Phillipson (2009b) and Pennycook’s (2004) ‘Centre’ and to Graddol’s (2006) ‘Major English-Speaking Designation Countries (MESDS)’. Institutions in these traditional English-speaking countries also dominate the league tables (Graddol, 2006), which increasingly influence
student choice (Coleman, 2006), and they have therefore enjoyed the dual advantage of offering well-regarded credentials and the highly sought-after commodity of English.

English-speaking countries are popular destinations and over 42% of all cross-border students opt for one of the five core Anglophone nations. The chart below shows the distribution of foreign students in tertiary education globally (OECD, 2013). Four of the top six destinations are English-speaking; the USA has the largest share at 16.5%, followed by the UK (13%). Australia was recently overtaken by Germany and France but remains in the top five (6.1%) while Canada is sixth (4.7%) (OECD, 2013).

![Distribution of foreign students in tertiary education by country of destination](image)

*Figure 1.1. Distribution of foreign students in tertiary education by country of destination (OECD, 2013, p.307)*

Traditional Anglophone countries have experienced considerable growth in international enrolments in recent years. For example, in the US, international graduate applications have increased for ten consecutive years (Council of Graduate Schools, 2015), and the number of international students grew 6.5% to 764,495 during the 2011/12 academic year (IIE, 2015). In the same academic year, almost half a million students were studying in the UK, with full-time undergraduate study up 8% and research postgraduates up 5% on the previous year (UKCISA, n.d.) and there are plans to massively increase UK education exports by 2020 (Going Global, 2015). Canada enrolled
100,000 international students in the same year, a record number and an increase of 60% since 2004 (CIC News, 2013). The students in question come from a range of countries, predominantly where English is not their first language, and over half originate from Asia as shown in the pie chart below. China and India are the two biggest source markets for the US, UK, Australia and Canada.

![Pie chart showing distribution of foreign students in tertiary education by region of origin](image)

*Figure 1.2. Distribution of foreign students in tertiary education by region of origin (OECD, 2012, p.369)*

1.2 International higher education around the world

Given the high number of enrolments globally, it is of interest to consider some key higher education contexts around the world before focusing on Australia, which is the focus of this thesis. In particular, we consider Anglophone destinations with large cohorts of international EAL students who originate from similar source countries to Australia, and with comparable undergraduate language entry requirements.

1.2.1 The UK

The UK has long attracted international students, partly as a result of its colonial past (Walker 2014). As the second largest destination of
international students globally (Walker, 2014) from similar source markets to Australia (https://www.hesa.ac.uk), the UK experiences numerous challenges around the ELP of its EAL graduates. In 2009, the UK national tertiary regulator, the Quality Assurance Agency (QAA), published a report investigating concerns about academic quality and standards (QAA, 2009), prompted largely due to issues raised in the media. Although not focussed on international students specifically, one of its key themes was the language levels of EAL international students and the impact of their outcomes in the sector more generally. There had been a perceived downgrading of the university experience for domestic students because of the number of international students with ‘poor’ English, leading to malpractice, the use of essay-writing companies and alleged lenient marking from lecturers for EAL students. The report identified challenges where the commencing English language proficiency of students was said to be insufficient to deal with the demands of their study. Support offered by institutions to develop academic language of EAL students was found to be variable in both its availability and effectiveness. The report made a number of recommendations including that institutions review ELP entry standards and provide a statement on the kind of support that would be available in relation to linguistic, academic and personal support. Three years later, the same body published a report focusing specifically on international students (QAA, 2012) but, despite previously noting concerns, it made surprisingly few comments related to the academic language or literacies of EAL students at entry or exit, noting simply that:

> Institutions should make clear the English language requirements for their programmes, together with the qualifications and tests which will be used as evidence that these requirements are met. Institutions should also make clear to students such cases where language competency upon completion of the programme, or at points within it, is expected to be greater than at the point of entry (p.12).
This at least stipulates an expectation of improvement in ELP during degrees, though it is not a standard that students (or institutions) will be measured against. The only indication of how this might be achieved is through the recommendation that “institutions should have in place appropriate arrangements to enable students to cope with the demands of the programme in the context of the continual development of their language skills” (QAA, 2012, p.23). Wingate, Andon and Cogo (2011) suggest that UK universities have been slow to transition from a traditional focus on élite students. Where skills development measures are implemented, they have been described as ‘bolt-on’ extra-curricular, generic Band-Aid solutions (Wingate, 2006) because of the mountainous task of securing the commitment of all academics, as well as the level of staff consultation and development measures that would be required to enact major change.

The UK has been distracted in recent years by the negative public perception of international students, matters of ensuring they are legitimate students (Tapia, 2014), determining whether they should be counted in migration figures (International Students and the UK Immigration Debate, 2014), and the issue of working visa rights (Walker, 2014). No policy or set of standards related to ELP development or outcomes has therefore been proposed. This is perhaps indicative of the ethos in the UK tertiary sector, which is more independent and less centralised than in Australia and where such matters have traditionally been managed at the institutional level. Yet, while there might currently be little possibility to enact top-down national change in the UK, it is evident that EAL students’ outcomes are attracting increasing scrutiny and appear to warrant attention.

1.2.2 New Zealand

The scholarly literature suggests similar issues in New Zealand to the UK regarding the ELP of its EAL students (Beaver & Tuck, 1999; Ellis, 1998; Read, 2008; Read & van Randow, 2013). Despite this, the New Zealand
Academic Quality Agency audit framework makes no mention of English language proficiency (AQA, 2013). Although there are examples of diagnosis and subsequent support for EAL internationals at the individual institution level (Read 2008; Read & von Randow 2013), there appears to be no discussion on this matter at the policy level nationally.

1.2.3 Canada

Canada, like Australia and New Zealand, attracts large numbers of international EAL migrants as well as EAL fee-paying university students, and from similar source countries. Extensive work has been undertaken on the development of national language benchmarks aimed at second language adult literacy (Centre for Canadian Language Benchmarks, 2015), yet there is no evidence of a policy or standards framework or of national consideration of ELP once EAL students articulate into university programs.

1.2.4 The USA

As the largest player in international education with over 16% of the global market, the USA is of particular interest. The US has a strong history of supporting EAL immigrant and bilingual children (Bailey, 2007; Cummins, 1984, 2000; Gottlieb, 2003; Scarcella, 2003), no doubt due to the 51% growth in EAL school age children between 1998 and 2008 (National Clearinghouse for English Language Acquisition and Language Instruction Programs, 2011). In 1997, the first PreK-12 ESL standards were created to provide national coherence for the development of effective and equitable education for EAL children in US schools (TESOL Inc., 1997; TESOL International Association, 2006). This focus on EAL children has continued: in 2001 the No Child Left Behind Act (House of Representatives, 2001) was passed and the Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficiency Students was created to ensure that such children were catered for (Bailey, 2007). In 2010, the Common Core State Standards were introduced, and in 2013, the English
Language Proficiency for the 21st Century initiative (ELPA21) was launched, a set of ten standards to be met across grade levels. Support for English Language Learners in the primary and secondary sectors is clearly well-regulated and developed in the US. However, no set of standards or policy exists for EAL students in the tertiary sector. One reason for this may be due to the federal nature of the USA and the independence of its higher education institutions (Chalhoub-Deville, personal communication, November 21, 2014). Such issues may also currently be unnoticed or under-researched due to the pro rata effect of the presence of EAL students in individual institutions, which is growing but still small in comparison to other Anglophone nations at only 4% (Cho & Yu, 2015). Queries from the researcher at the TESOL Convention 2015 to several American experts involved in standard-setting projects at both state and federal levels provided anecdotal confirmation of this view. Most admitted they had not considered the ELP of international EAL university students, assuming that they were coping linguistically if they were graduating and, as they were probably returning to their home country afterwards, their graduating ELP was of limited import. Certainly it seems that EAL university students’ outcomes are not on the US national higher education agenda. However, since international students in the US hail from similar countries to those in other Anglophone nations, and in far greater numbers, it is fair to assume that issues relating to the ELP are largely comparable.

1.2.5 Non-Anglophone nations

With the increasing adoption of EMI at tertiary level, non-Anglophone countries are increasingly focusing on the ELP outcomes of their graduates. Hong Kong, for example, initiated exit testing using a formal English proficiency test at graduation in 2002 due to perceptions that the ELP of tertiary students was in decline (Berry & Lewkowicz, 2000; Gan, 2009; Qi, 2004, 2005; Qian, 2007). Although this initiative has now been phased out, it evidences concern in relation to ELP outcomes. Taiwan, though not a traditional EMI context, also implemented exit testing in 2003, due to the
perceived deterioration of the language standards of their graduates and to encourage universities to set thresholds of language proficiency (Gong, 2009; Hsu, 2009; Pan, 2009; Pan & Newfields, 2011). In Pakistan, some have even attributed poorer outcomes to EMI policies (Khan, 2013; Mansoor, 2005, 2009).

While it is evident that ELP outcomes may be of concern in various higher education contexts, this has not translated to a systematic approach to the development of ELP during university degrees, or to explicit standards required at key stages of the student lifecycle. We now turn to the Australian context.

1.3 International higher education in Australia

1.3.1 International students and the quantity/quality nexus

Similar to other traditional English-speaking countries, international education has seen phenomenal growth in Australia in the last two decades (Marginson, 2002, 2011) as shown in figure 1.3 below. The latest data indicates that the value of the international education sector as a whole hit a record high at $18 billion in 2015 (Campus Review, 2015). The number of international student enrolments has risen from approximately 90,000 in 1994 to in excess of half a million each year since 2008 (Chaney, 2013), even during the GFC, making international education Australia’s largest export after resources (Connelly & Olsen, 2012; IEAA, 2012). The higher education sector, specifically, has also grown markedly over this period as can be seen in the graph below, and around forty per cent of all visas granted are for the higher education sector (Chaney, 2013).
Universities have become heavily dependent on this market (Knight, 2011). By 2011 in Australia, the average percentage of enrolments from the international market was over 21% and some institutions had student bodies comprising almost forty-five per cent international (Chaney, 2013). This reliance on the international student dollar is due in part to the decrease in government funding for tertiary institutions; between 1993 and 2003, for example, Australia reduced public funding per tertiary student by thirty per cent (Hawthorne, 2009). University management wishing to cross-subsidise research with international income is arguably another factor.

While the size of the international cohort has grown, so too have concerns over the outcomes of students with English as an additional language (EAL), who make up the bulk of these international enrolments. Oliver, Vanderford and Grote (2012) noted that “there is growing concern that the limited English language competency among international students, current and graduating, has become an obstacle to their success” (p.2).

Figure 1.3. International student enrolments in Australia 1994-2014

(Australian Government, 2015a)
1.3.2 EAL students’ English Language Proficiency (ELP) and the media

The ELP of international EAL students periodically attracts the attention of the media. In 2010, for example, *The Australian* newspaper reported that “it is impossible to report with any confidence the language abilities of our graduates” (Arkoudis, 2010). This view was perhaps most poignantly summarised by a cartoon that appeared in this national broadsheet in 2010. In it, an international student is asked what she plans to do after graduating from her degree in Australia, to which she replies “Maybe get a job, maybe learn English”.

In 2011, the focus on graduating proficiency was gaining momentum in the media with the suggestion that “far less attention is being given to understanding exit standards and to ensuring students graduate with the English language skills for employment or further study” (Arkoudis, 2011). Lane (2012) cited the "unwritten assumption that non-English-speaking students taken in with IELTS 6.5 would improve as they studied and emerge employable as professionals” and stated that there was "increasing recognition that international students need English language training in order to graduate as job-ready”. This concern over EAL students continues, exemplified by a high profile documentary entitled Degrees of Deception aired on ABC, the national broadcaster, at prime time in 2015 (ABC, 2015).

Such media attention has reinforced the negative public perceptions of the quality of EAL graduates in terms of their language outcomes and work-readiness. On the one hand, international students have been painted as a source of contempt for their perceived lack of adequate English language skills (ABC, 2015; Devos, 2003; Trounson, 2011), yet simultaneously regarded as valuable in relieving the financial pressures facing Australian universities. But how accurate is this perception of poor English language outcomes for EAL students, and where did it stem from?
1.3.3 The focus of ELP in Australian higher education

Much of the focus on the English language proficiency of international students in the Australian higher education context can be traced back to the findings presented by Birrell, Hawthorne and Richardson (2006) in their report to the Department of Immigration and Citizenship (DIAC)\(^1\), which raised serious concerns about the language standards of international students not only when they gain entry to Australian tertiary institutions but also when they graduate from them. Birrell et al. found that at least a third of the former Australian university students who were applying for Graduate Skilled Migration (GSM) during the period researched had provided test scores in their visa application that were lower than IELTS 6.0\(^2\). Many only achieved IELTS 5.0, which was the threshold competence required for each macro (Reading, Writing, Listening and Speaking) at the time. More specifically, the research found that 43% of Chinese graduates applying for GSM only obtained IELTS 5.0 post-graduation and large numbers of students from Vietnam, Thailand, Taiwan and Korea also performed poorly. This raised the question of how these graduates could have passed their university exams with such low levels of language, and also what was occurring to English language ability during degree studies. Prior to this time, onshore GSM applicants had been exempt from English language testing as the language competence of EAL graduates was assumed by dint of the time spent studying and living in Australia. The Birrell report and the ensuing debate brought into question the previously held assumption that the credential was adequate evidence of English language ability. Much debate ensued related to “the potential to compromise English standards in terms of academic entry, progression and exit” (Hawthorne, 2007, p.23). The report concluded that many international students must enter institutions at language levels below the published guidelines, blaming pathway programs, which do not require a formal test to prove language proficiency before entry to the degree itself. These non-test pathway programs have become increasingly common in Australia and, in some institutions, relatively few students meet

\(^1\) Now renamed the Department of Immigration and Border Protection (DIBP)

\(^2\) IELTS was the only proficiency test accepted at the time
the language condition to enter universities via formal proficiency tests, sometimes as low as 7% (Oliver, Vanderford, et al., 2012). The Birrell report meant that, for the first time, universities were forced to seriously examine their support and practices for the entire student journey.

As a result of mounting concern, in 2007, Australian Education International (AEI) commissioned the International Education Association of Australia (IEAA) to hold a national symposium related to the English language competence of international students in Australian universities. It was evident that the focus was shifting from predominantly front-end evidence of ELP to three key stages of the student lifecycle: entry, in-course and exit (Arkoudis & Starfield, 2007; Hawthorne, 2007; O’Loughlin & Murray, 2007).

**The Good Practice Principles for English Language Proficiency of International Students in Australian Universities (GPPs)**

The Birrell report was the catalyst for change in Australian universities. Specifically, it led to the publication of the *Good Practice Principles for English Language Proficiency of International Students in Australian Universities* (GPPs), a report to the Department of Employment, Education and Workplace Relations in 2009 (DEEWR, 2009). This ground-breaking national report outlined the need to tackle the issue of ELP at an institutional level, forcing universities to examine their entry requirements and concurrent support mechanisms. It provided a set of ten good practice principles (figure 1.4), which put the responsibility squarely on the institution for ensuring adequate language skills from enrolment to graduation, while also explicitly stating that additional responsibility resided with the student.

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1. Universities are responsible for ensuring that their students are sufficiently competent in the English language to participate effectively in their university studies.
2. Resourcing for English language development is adequate to meet students’ needs throughout their studies.

3. Students have responsibilities for further developing their English language proficiency during their study at university and are advised of these responsibilities prior to enrolment.

4. Universities ensure that the English language entry pathways they approve for the admission of students enable these students to participate effectively in their studies.

5. English language proficiency and communication skills are important graduate attributes for all students.

6. Development of English language proficiency is integrated with curriculum design, assessment practices and course delivery through a variety of methods.

7. Students’ English language development needs are diagnosed early in their studies and addressed, with ongoing opportunities for self-assessment.

8. International students are supported from the outset to adapt to their academic, sociocultural and linguistic environments.

9. International students are encouraged and supported to enhance their English language development through effective social interaction on and off campus.

10. Universities use evidence from a variety of sources to monitor and improve their English language development activities.

**Figure 1.4.** The Good Practice Principles for International Students in Australian Universities (DEEWR, 2009)

After the publication of the GPPs, universities in Australia attempted to amend perceived deficiencies in their students’ language abilities in a number of ways, many arguably assuming that the principles were, in fact, a set of standards to be met as opposed to principles of best practice. The auditing body of the time (AUQA) began to take the issue of ELP seriously (Harris, 2010), and by 2010 universities were said to be “under unprecedented pressure to up their game in respect of English language provision” (Murray, 2010, p.356). This is evident in the exponential increase in support offered to EAL students in Australia between 2008 and 2011 as noted in an audit conducted by the national Association for Academic Language and Learning (AALL) (Barthel, 2011). In this three-year period, for example, diagnostic post-entry language assessment was widely adopted, increasing by 44%.,
while integrated courses for credit had increased by 54% in Australian higher education institutions as shown in Table 1.1 below.

Table 1.1

*Academic Language and Learning Support 2008 & 2011 (adapted from Barthel, 2011)*

<table>
<thead>
<tr>
<th>Support type</th>
<th>2008</th>
<th>2011</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic post-entry assessment</td>
<td>18</td>
<td>26</td>
<td>44%</td>
</tr>
<tr>
<td>Individual consultations</td>
<td>38</td>
<td>38</td>
<td>N/A</td>
</tr>
<tr>
<td>Integrated courses for credit</td>
<td>13</td>
<td>20</td>
<td>54%</td>
</tr>
<tr>
<td>Integrated courses non-credit</td>
<td>26</td>
<td>34</td>
<td>31%</td>
</tr>
<tr>
<td>Generic courses for credit</td>
<td>13</td>
<td>16</td>
<td>23%</td>
</tr>
<tr>
<td>Generic courses non-credit</td>
<td>28</td>
<td>37</td>
<td>32%</td>
</tr>
</tbody>
</table>

Despite their national impact, the GPPs attracted criticism because they were aimed solely at international students. Although the document stated that “the Principle holds equally for international students as for domestic students” (DEEWR, 2009, p.9), the full title of the principles3 suggested otherwise, and the inherent tension was discussed in the literature (Harper, Prentice & Wilson, 2011; Murray, 2010). A further issue was the fact that the GPPs were only principles of good practice and therefore set no minimum level of ELP at any stage of academic study. They were therefore described as aspirational (Martin, 2011) and a ‘starter gun’ rather than a ‘silver bullet’ (Barrett-Lennard, Dunworth & Harris, 2011).

**The English Language Standards for Higher Education**

In 2010, the reconvened steering committee released a draft document entitled English Language Standards for Higher Education (AUQA, 2012) recommending that six of the ten GPPs (#1, 2, 3, 6, 7 & 10) be adopted as

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3 The good practice principles for English language proficiency of international students in Australian universities
standards. According to Martin (2011), this proposed conversion to “heralds an expanded understanding of the role of ELP in the higher education sector” (p.21). The English Language Standards for Higher Education (ELSHE) (see figure 1.5) were published in June 2012 and underline the importance of ELP at entry, during and at exit of the degree program.

1. The provider ensures that its students are sufficiently proficient in English to participate effectively in their higher education studies on entry.

2. The provider ensures that prospective and current students are informed about their responsibilities for further developing their English language proficiency during their higher education studies.

3. The provider ensures that resourcing for English language development meets students’ needs throughout their studies.

4. The provider actively develops students’ English language proficiency during their studies.

5. The provider ensures that students are appropriately proficient in English when they graduate.

6. The provider uses evidence from a variety of sources to monitor and improve its support for the development of students’ English language proficiency.

**Figure 1.5.** English Language Standards for Higher Education (AUQA, 2012).

One of the key differences between the GPPs and the ELSHE was that the latter referred to all higher education providers – not only universities – and to all students regardless of the labels ‘international’ or ‘domestic’. Rather than an important graduate attribute as described in the GPPs, the language had gained strength in the ELSHE, requiring institutions to actively develop, ensure ELP and use evidence. Universities began to endeavour to meet such standards in preparation for audits and the ELSHE proved to be powerful incentives for change. The Degrees of Proficiency project (Dunworth, Kralik, Moore & Mulligan, 2013), funded by the national Office for
and Teaching, evidences uptake in academic language and learning support by institutions nationally.

While commendable for placing ELP on the higher education agenda, neither the GPPs nor the ELSHE were empirically-based nor theoretically-motivated. As noted by Chalhoub-Deville (2014), standards are often committee-created, and lacking in empirical foundation and theory.

1.3.4 The governmental focus on ELP in Australia

Since 2007, ELP has also received increasing attention in government reports. The publication of the GPPs in 2008 coincided with the publication of The Review of Australian Higher Education (Bradley Review) (Bradley, Noonan, Nugent, & Scales, 2008). This high profile national review encouraged institutions to “place a greater emphasis on the preparation of international students for the world of work and particularly for working in Australia” (Bradley, et al., 2008, p.103). In 2010, the Commonwealth government published a review of the Educational Services for Overseas Students (ESOS) Act (Baird Review) (Baird, 2010). This review also commented on issues related to ELP, arguing that “providers are not adequately considering the actual English language needs of a student to complete a particular course” (2010, p.10). It recommended that providers ensure that “English language entry levels and support are appropriate for the course and, where relevant, the expected professional outcomes” (p.11).

A third key review in this period was the Strategic Review of the Student Program (Knight Review) (Knight, 2011), commissioned to re-consider policy for overseas students. It, too, made a number of recommendations to the government related to international students, referencing language outcomes and noting that students themselves reported a decline in their proficiency over the course of their degree (Knight, 2011). One outcome of the Knight Review was the opportunity for universities to opt in to the Streamlined Visa Processing arrangements which provide improved access
international markets. In order to continue to take advantage of this arrangement, universities had to demonstrate compliance with the ten points stipulated in the guidelines, including two which explicitly related to language, underlining the pivotal role of ELP. A further key report entitled *Australia – Educating Globally: Advice from the International Education Advisory Council* (Chaney Report) (Chaney, 2013) also highlighted the importance of ELP for graduate employability.

A key driver for change during this period has been the attitude of the national higher education regulator, the Tertiary Education Quality and Standards Agency (TEQSA), which was created in 2012 to replace AUQA. The TEQSA commissioner was quoted as saying that “admission standards were only part of the story and that exiting competence was also a focus” and that this was a “major, decade-long, sector-wide issue” (Lane, 2012). As a result, TEQSA noted that providers must “demonstrate that students who complete the course have developed an appropriate level of English language proficiency through their studies” (2013, p.22). There was widespread belief that TEQSA would introduce standards for ELP at entry and at exit to university programs, potentially utilising the ELSHE as their basis. This has not yet eventuated; however, the matter appears to be back on the national agenda in the form of the *Draft National Strategy for International Education* (Australian Government, 2015b). A recommendation in this latter report states that providers should “establish processes that ensure international students maintain adequate English language proficiency throughout the duration of study to prepare graduates for work experience and employment opportunities” (p.67). The strategy is currently at consultation phase but a coordinating council comprising six government ministers and six education industry experts has been announced, and there is an expectation that a policy and standards framework which includes explicit reference to ELP might be forthcoming.
Despite the discussion, publications and high level reports summarised above, the *Good Practice Report – English language Proficiency* (Arkoudis & Doughney, 2014) notes that students can still graduate without their communication skills, including ELP, being assessed. The authors argue that ELP needs to become part of the core business of universities, defined and explicitly assessed as an integral of the quality assurance framework and within disciplinary learning. In a companion report, it was recommended that the responsibility for this should be distributed among university senior management, course co-ordinators, academics, and academic language and literacy advisors (Arkoudis, 2014). In Australia, this is not yet the case.

**1.4 Overview of the thesis**

**1.4.1 Statement of the problem**

The spread of English and the uptake of EMI in many countries around the world in recent years has changed the higher education landscape considerably. EMI is no longer exotic but a contemporary phenomenon that has come of age (Wachter & Maiworm, 2008; Wilkinson, 2014). This shift is raising numerous questions including the impact that EMI is having on teaching, learning and assessment, and on student outcomes (Dearden, 2014). In Australia specifically, the policy space demonstrates that the ELP of EAL graduates is on the national higher education agenda; in other countries, it seems that similar issues exist but may be less well-documented or researched. If ELP standards are to be entrenched in policy, as signalled in the Australian context, they should arguably be based on empirical evidence from the local higher education context, rather than being driven by the media or commentary by stakeholders about declining standards in the sector. The better we understand the issue, the more appropriately we can enact change that has a positive impact.

What is patently absent in much of the debate, as we have seen, is the voice. While the views of experts and practitioners are critical, few reports
reviews provide the student viewpoint; to date, student conceptualisations of the construct of ELP are under-represented (if not lacking) in policy discourse. As the critical stakeholder, it is axiomatic that their views are of import for practice because, while the communicative competence-in-performance of international students may be evaluated by many stakeholders including academics, employers, and language testing experts, it is the students themselves who must be the key drivers of their language development. Without a clear understanding of their espoused beliefs and conceptualisations, as well as what might motivate such views, it is challenging to optimise change in policy or practice. Institutional interventions may be inappropriately targeted, possibly at great expense, if not motivated by research findings which have explored the issue from the student viewpoint. It is therefore crucial to investigate their understanding vis-à-vis the nature of ELP in the higher education context, to ascertain it converges or diverges from accepted theory, to investigate any gaps in knowledge, and to consider the implications of such understandings.

1.4.2 Significance of the study

The literature suggests that institutions should carry out their own research (DEEWR, 2009; Doiz et al., 2013) to lay the foundation for institutional language policy and practice. The implications and recommendations of this study will, of course, be of particular interest at the University where the research was undertaken. However, as described in this chapter, with burgeoning numbers of international EAL students in EMI contexts globally whose outcomes are increasingly under scrutiny, this study has social premium and therefore broader significance. The implications of the study will be of interest, in particular, in English-speaking higher education contexts where EAL students are enrolled.

In this thesis, student conceptualisations of ELP are analysed with respect to key variables so as to investigate any systematic variability in those conceptualisations. These views are then compared with measurable
graduating outcomes. The study also compares student views with both policy discourse and the theorisation of ELP in the literature to ascertain the degree of convergence or divergence, and to consider implications for and practice, currently missing in the extant literature. In this way, the study provides empirical evidence to progress what is known about the construct ELP in the higher education context. Additionally, and in contrast to other studies to date, this study utilises data from language proficiency tests undertaken by graduating students for authentic post-graduation purposes. High in ‘ecological validity’ (i.e. approximating the real world) (Brewer, 2000), it provides a unique perspective on students’ measurable graduating outcomes. Capitalising on the student views, pragmatic recommendations made for institutions interested in addressing concerns around such outcomes. Importantly, the heuristic for ELP in higher education provided the final chapter makes an important theoretical contribution to the field, at time when few extant models exist and the construct still remains somewhat under-theorised.

1.4.3 Thesis structure

The thesis comprises seven chapters which investigate the construct of ELP in the higher education context. It focuses on undergraduate EAL student conceptualisations and their graduating outcomes as measured by Grade Point Average (GPA) and IELTS Academic. This first chapter has provided background and context to the study, providing data on EAL student university enrolments and contextualising the matter in the policy discourse. Chapter 2 moves from policy to the literature, providing an historical overview of the theoretical and conceptual frameworks of ELP in the Second Language Acquisition (SLA) literature as well as in academic contexts. It goes on to provide a review of the literature on EAL graduate outcomes, and a summary of the existing literature on student conceptualisations of ELP. Chapter 3 details the methodology and research design of the study, as well as providing the researcher’s epistemological stance, and stating the limitations of the study.
Chapters 4-6 contain the primary research. Chapter 4 investigates undergraduate student conceptualisations of the construct of ELP in the higher education context via multiple focus groups. The focus group findings inform the design of a subsequent large-scale survey, discussed in Chapter 5, which further interrogates the construct of ELP from the student viewpoint. These two chapters consider how students conceptualise the construct and whether there is any systematic variability in those conceptualisations. Chapter 6 analyses the graduating language proficiency test scores and academic outcomes of a large cohort of undergraduate EAL students and, again, investigates any systematic variability across the cohort. The discussion in Chapter 7 integrates the findings of these three primary research chapters, referring back to policy discourse from Chapter 1 and also to the theoretical models and frameworks from Chapter 2, concluding with a set of key recommendations from the study.
Chapter 2: Literature review

In this chapter, the literature related to the construct of ELP is reviewed. Starting with the early proficiency scales, a brief chronological journey is taken through the decades, investigating definitions, terminology, theorisation and the nexus between the constructs of ELP and communicative competence. After consideration of the construct in the Second Language Acquisition (SLA) literature, we turn to definitions and models of academic ELP (AELP), first in non-tertiary contexts and then in higher education. The scholarly literature related to ELP at and beyond graduation is then reviewed, and finally the literature on student perceptions of ELP is summarised. Through this review, the current state of the art with respect to theorising and measuring ELP along with student conceptualisations of the construct in higher education are highlighted, providing the necessary context for the research questions at the end of the chapter.

2.1 An historical overview of ELP

2.1.1 Early proficiency scales

Attempts to create language proficiency scales occurred as early as 1938 (Spolsky, 2000), although the US Foreign Service Institute (FSI) scale is generally bestowed with the honour of being the first proficiency rating scale. Interest in proficiency intensified in the Second World War and the FSI scale was developed as part of training and accreditation of Foreign Service personnel in the 1950s (Richards & Schmidt, 2010). The FSI was itself the forerunner of numerous other scales including the Australian Second Language Rating System (ASLPR) (Wylie & Ingram, 2007), the Interagency Language Roundtable (ILR) scale for US government employees and, later, the American Council of the Teaching of Foreign Languages (ACTFL) (Ingram, 1985). These scales rated oral proficiency on a continuum from ‘none at all’ to ‘perfect’. Despite their key role and influence on more recent scales such as the Common European Framework of Reference (CEFR), understanding of language proficiency changed considerably over time and,
not surprisingly, these early scales were later heavily criticised (North, 1995, 1997). The extremes of the scale were problematic, zero ability at one end and the perfect native speaker at the other, and both are now considered tenuous concepts (Brindley, 1991). The scales were also criticised for being based on intuition rather than on theories of linguistic description or measurement such as item-banking and Rasch rating, and research had not developed an adequate empirically validated description of the complexity of language proficiency (North, 1998, 2000; Spolsky, 1989; Wylie, 1996). These comments underline the state of play in this era where theory and empirical validation did not yet play a role in defining the construct of language proficiency.

2.1.2 Unitary Trait Hypothesis versus the divisible competence hypothesis

Early frameworks in the sixties influenced by behaviourism and structural linguistics, such as those of Lado & Carroll (Purpura, 2008), had indicated the importance of macro skills (listening, reading, writing, speaking) as well as knowledge (grammar, vocabulary, phonology, graphology) but did not show how they were related (Bachman, 1990). The prevailing view was that proficiency involved the four macro skills and language ‘components’ i.e. vocabulary, phonology and grammar. In 1976, Oller challenged this view with his controversial theory that proficiency was indivisible and unitary, though he later retracted the notion of the unitary trait or global proficiency and it was replaced with the view that proficiency is multicomponential. The divisible competence hypothesis, which held the view that individuals could differ in their abilities per skill area, became accepted; specifically, the de-coupling of receptive and productive skills occurred, and it became widely accepted that listening and reading ability would exceed productive speaking and writing ability due to what Stevick termed the “comprehension advantage” (Galloway, 1987). This view of divisibility was to inform all later frameworks and models as well as test design.
2.1.3 The Proficiency Movement & the ACTFL Guidelines

The US Proficiency Movement of the 1980s had a key influence on the understanding of proficiency and was considered somewhat of a paradigm shift (Byram, 2004). One outcome of this movement was the development of the ACTFL Provisional Proficiency Guidelines in 1982, which explicitly related to proficiency rather than achievement (Hiple, 1987) at four main proficiency levels. The guidelines described proficiency as having two fundamental characteristics: firstly, it was seen as a hierarchical sequence of performance ranges rather than a series of defined discrete-point equidistant steps with large gaps in between. Also, each level subsumed all previous levels so “succeeding level is characterised by overlap and refinement” (Galloway, 1987, p.27). These guidelines became a common yardstick, inspiring future standards and curriculum frameworks, particularly in the US (Spolsky, 2000; Byram, 2004). Yet despite the fact that many of these principles are still common in proficiency testing today and set standards that would be far-reaching, the Proficiency Movement and the ACTFL Guidelines in particular came under fierce criticism from a number of fronts. Their use of educated native speaker norms as the single overriding consideration was highly contentious even at the time (Savignon, 1985). Validity was also questioned due to an alleged reduced and artificial speech type with emphasis on separate discrete features and often with grammar weighted highest. Savignon (1985) considered the guidelines a backward step; Brindley (1991) agreed, arguing that the guidelines did not account for variability or backsliding, assuming a linear, incremental and lock-step increase in all aspects of language. Generally, the view of applied linguists was that the ACTFL Guidelines were atheoretical (North, 2000; Savignon, 1985; Spolsky, 1989, 2000).

2.1.4 Definitions and terminology in the 80s and 90s

In the eighties and early nineties, experts still held differing conceptions of proficiency, whilst some felt unable to define it at all. It was said to be “one of the most poorly defined concepts in the field of language testing” (Ingram &
Wylie, 1993). Lantolf and Frawley maintained even in the late eighties that “there is nothing even approaching a reasonable and unified theory of proficiency” (McNamara, 1990, p.186). Larsen-Freeman also reflected on “the nettlesome problem of language proficiency”, agreeing “how difficult it was to achieve agreement on its definition, let alone its measurement” (1991, p.45). Vollmer made the somewhat unhelpful comment that “language proficiency is what language proficiency tests measure. This circular statement is about all one can firmly say when asked to define the concept of proficiency to date” (in Ingram, 1985, p.152). Taylor (1988) attempted to explain proficiency as the ability to make use of competence while performance is what is done when proficiency is put to use, but this definition seems to further obfuscate rather than clarify. He goes on to suggest that competence can be regarded as a static concept, having to do with structure, state or form, whereas proficiency is a dynamic concept, having to do with process and function. Ingram and Wylie were among the few to be firm on what proficiency entailed, describing it as “the ability to mobilize knowledge of the various systems of the target language to carry out communication tasks in particular contexts” (Ingram & Wylie, 1993, p.221). For them, proficiency was total language behaviour demonstrated by the learner and “more than the sum of its parts” (1993, p.7). Bachman was also clear in his view, describing it as “knowledge, competence or ability in the use of a language, or ability in the use of a language, irrespective of how, where, or under what conditions it has been acquired” (1990, p.16).

At this time, there was not even consensus as to whether proficiency was, in fact, a construct at all, though most agreed it was (Ingram 1985; McNamara, 1990). Davies believed that “proficiency is…an abstract construct which we can only get at indirectly...We have to invent it, define it, find something that it stands for” (Davies, 1995, p.1). For this reason, Bachman (1990) claimed that the term proficiency in 1990 had come to be associated with foreign language teaching circles, almost exclusively with a specific testing procedure and, as such, he believed it held somewhat negative connotations
in some circles. He went on to provide two contrasting theoretical views of language proficiency, positing that language proficiency might be seen as *pragmatic* ascription; that is, that the student is able to do *x* in which there is no need to postulate existence of explanatory constructs which underlie proficiency. Alternatively, it could be described as a *theoretical* construct; that is, that the student has the ability to do *x* (Bachman, 1990, p.254), which implies the existence of psychological phenomena which govern the behaviour of a language user. It was only later that empirical validation was able to statistically confirm proficiency as a construct.

Around this time a profusion of terms was being suggested by various experts in the field including ‘communicative language ability’ (Bachman), ‘communicative proficiency’ (Bachman and Palmer), ‘communicative language proficiency’ (Bachman and Savignon; Taylor), ‘communicative capacity’ (Widdowson), and ‘ability for use’ (Canale and Swain). McNamara went so far as to declare a “pressing need for definitional clarity” (1990, p.26) to “untangle the considerable confusion and even disagreement about the meaning or use of the terms, as they have acquired successive accretions of meaning” (p.25). Despite this so-called ‘Humpty Dumpty approach’, where terminology assumed whatever nuance of meaning the neologiser wished it to (Taylor, 1988), there were some points of consensus. There was agreement, for example, that proficiency tests should simulate real life and strive for authenticity and real ‘use’ not formal ‘usage’, and that we wish to measure language use not just knowledge *about* language. There was also agreement that proficiency is graded at several discernible levels, can be differentiated by macro skill, and is multidimensional rather than unitary.

### 2.1.5 Theorisation in the 80s and 90s

Davies (1990) posits that proficiency testing moved from a peripheral role to a central one at this time, though there was still criticism regarding a clear theoretical basis. Some believed that “there will probably never be a generalisable empirically validated description of language proficiency”
Quinn suggested that there was a difference in view between ‘the theorists’ and ‘the practitioners’, positing that the theorists saw language proficiency as “problematic and elusive” (1993, p.72), while for practitioners the concept of proficiency was straightforward and not widely discussed. This tension between theoretical and operational models was reiterated by others (McNamara, 1990; North, 2000). Pragmatically, Weir (1990), Skehan (in Quinn, 1993) and North (2000) commented that test creators could not wait for a fully-fledged theory to materialise for operationalisation in tests. This was reiterated by Canale & Swain (1980) who said ‘ability for use’ was Pandora’s box and doubted any theory could explicate it, but McNamara’s responded that the box “just won’t stay closed” (1996, p.88) with regard to performance assessment. Dandonoli rather damningly states that “few tests grew out of solid linguistic theory - the only theory they are based on is test construction” rather than a coherent or explicit psycholinguistic theory and that their sole justification is that they work (1987, p.76). An example of this was during the ELTS revision project. In 1989, a number of applied linguists were surveyed by Clapham, Alderson and Westaway in an attempt to identify a model of language proficiency on which to base what would become the IELTS test. The responses were “varied, contradictory and inconclusive” (Davies, 2008, p.86) and as a result some decisions were made for practical rather than theoretical reasons, though it was agreed that IELTS would need to break new ground in devising and operationalizing the construct of proficiency (Davies, 2008; Ingram & Wylie, 1993). At this juncture, then, there was no robust validated theoretical grounding. There was also the thorny issue of how proficiency related to a conceptual framework that was simultaneously growing in prominence and recognition: communicative competence.

2.1.6 Communicative competence/communicative language ability

The term ‘communicative competence’ was originally coined by Hymes as a reaction against Chomsky’s limited definition of the scope of linguistic competence (Chomsky, 1965; Hymes, 1972). The notion is widely
considered to be the most influential theoretical development in the field (Lee, 2006; McNamara, 1996). Although many others used the term and contributed to the development of the concept (Spolsky, 1989), it is Canale and Swain who are acknowledged with exploring and synthesising the concepts into their seminal three-component framework of grammatical competence, sociolinguistic competence and strategic competence (Canale & Swain, 1980), which was further refined in 1983 to include discourse competence (Canale, 1984). Canale and Swain stressed the relevance of communicative competence to both second language teaching and testing due to the perceived inadequacy of previous proficiency tests and the need to define what it is we wish to measure (Spolsky, 1989). The framework is still widely referred to and it has dominated the field, even acquiring axiomatic status in Applied Linguistics, arguably due to its very simplicity (Bagaric, 2007).

The above model was largely unchallenged until Bachman’s Communicative Language Ability was proposed (Bachman, 1990), which re-organised the basic components proposed by Canale and Swain into two main areas of knowledge: organizational competence (grammatical and textual/discourse) and pragmatic competence (sociolinguistic and functional/illocutionary). Increasingly, the move was away from considering grammatical competence the key competence due to influences from pragmatics and philosophy of language by Searle and Austin and also the work of Widdowson and Candlin (Bagaric, 2007). The original model was amended in 1996 (Bachman & Palmer, 1996, 2010), adding the role of affective factors in language use; that is, non-cognitive factors underlying performance and affective schemata that influence language ability i.e. metacognitive strategies. Their model highlighted the role of strategic competence, which they hypothesised was separate from language competence (North, 2000). They also suggest (but do not describe) interaction between the components. Generally, this model is accepted as a more comprehensive conceptualisation of the construct (Bagaric, 2007; Purpura, 2008).
Neither framework is without its shortcomings or beyond criticism, however (Purpura, 2008). Canale accepts the model is problematic to operationalise due to the question of how the components interact and the relative contributions or overlap between them (Haugh, 1999). They have also been criticised for being static (Mahboob & Dutcher, 2014). Swain herself has since described the original framework as sterile, saying it did not account for human agency (Fox, 2009), and she felt it should be embedded in a sociocultural model. Haugh (1999) describes both the Canale and Swain and the Bachman models as ‘descriptive input’ frameworks. On his quadrant of dissecting continua showing the interaction of descriptive versus working models and also inputs versus outputs, he argues that there are no ‘working input’ frameworks in existence (i.e. frameworks that truly operationalize the components), leading us to have to infer from more theoretical models. However, North (2000) disagrees and describes Bachman & Palmer’s model as a working model while Canale and Swain’s (and that of van Ek and Trim) are considered to be descriptive.

Other models and refinements have been proposed over the years as beliefs about language have modified (Byram, 1997; Celce-Murica, 2007; Celce-Murcia & Dornyei, 1995; Halliday, 1978; Purpura, 2004). Celce-Murcia’s latest model, for example, emphasises the interactional and dynamic nature of the competences (2007). Several applied linguists have more recently suggested the inclusion of intercultural communicative competence, particularly Byram’s definition of the five savoirs necessary for the linguistic ‘sojourner’ (Byram, 1997). Kramsch has gone further, suggesting that symbolic competence is necessary, which embodies both communicative and intercultural competence (2006). The interactionists argue that communicative competence is not located solely within an individual but is achieved through the efforts of both parties in a particular situated context (Chalhoub-Deville, 2003; Chapelle, 1998; He & Young, 1998; Kramsch, 1986; McNamara, 2001). Similarly, the English as a lingua franca (ELF) and World Englishes proponents point to the fact that
successful language use requires a degree of proficiency by the receiver as well as the user, particularly in contexts where the ‘native speaker’ is not necessarily the dominant paradigm (Davies, 2011; Kirkpatrick, 2010a, 2010b, 2011; Kirkpatrick, Deterding & Wong, 2008; Leung, 2005). Byram even suggested that the notion of the native speaker should be replaced with ‘the intercultural speaker’ (Byram & Zarate, 1996). Despite these numerous refinements, the Canale and Swain and Bachman/Palmer models are considered canonical and are arguably still the most commonly cited.

2.1.7 The interaction between communicative competence and proficiency

There were differing views in the eighties and nineties regarding how the constructs of proficiency and communicative competence interacted. Ingram declared a distinction between the two (Ingram, 1985), though most experts disagreed, even finding such a view “curious” (McNamara, 1996). Savignon was firm that “language proficiency is communicative competence and should be evaluated as such” (Savignon, 1983, p.246) and was particularly scathing of those who suggested that communicative competence was passé and that the new band wagon was ‘proficiency’ (Savignon, 1985). Many cited the difficulty of moving from the theoretical abstraction of communicative competence to the practicalities of measuring performance (Larsen-Freeman & Long, 1991; North, 2000, Spolsky, 1989; Weir, 1990). Spolsky, for example, believed that “communicative competence theories have not yet…provided a theoretical basis for exhaustively describing the components of language proficiency or delimiting the boundaries between them” (1989, p.144), while McNamara (1996) noted Candlin’s limits of testability where the boundaries of communicative competence must be drawn.

Most experts saw overlap or interaction between communicative competence and proficiency; some viewed the latter as the manifestation of the former (North, 2000). Davies (1995) viewed proficiency as part of communicative competence but described the latter as shapeless and difficult or even
impossible to define and limit because it slides back and forth between knowledge and control. Byrnes agreed they were subsumed within one another as “an underlying communicative competence does gradually develop as a necessary part of a proficiency/performance approach” (1987, p.128). Bachman and Davies saw proficiency and communicative competence as being reciprocal as the former verifies the theoretical model and “offers applied linguistics an operationalizing of its theoretical construct” (Davies, 1990, p.2). Bachman was even more definite that models of communicative competence provided “theoretical definitions for the development of tests and the tests in turn provide the basis for verifying or falsifying these theoretical models” (1990, p.68). Davies (2007) suggests that IELTS, for example, took an “abstract view of communicative competence, sampling what has been called communicative ability [supported by a] Bachman interactional authenticity rather than a real life authenticity model” (p.77).

The interaction between proficiency and communicative competence was clearly contested terrain. One way to move this forward was argued to be through the validation of the components of communicative competence. This might allow the identification of the weighting and possible overlap of various components which could be operationalized in the measuring of proficiency. Two main ways to attempt to do so developed during this time: descriptive (qualitative) validation and empirical (statistical) validation. The relative contributions of each of the components in the model have been investigated by many, including an extensive study by Harley, Cummins, Swain and Allen, which attempted to validate the Canale & Swain model with multi-trait matrix method (MTMM) (1990). They found no support in their factor analysis to conclude that any component carried more weight. Having experimented with different rotational methods, agreement was reached that the construct was indeed modular, consisting of at least two components: grammatical and sociolinguistic/sociocultural, though they suggested that more testing of the sociocultural or intercultural dimension was needed.
Bachman & Palmer came to a similar conclusion when attempting to empirically validate the theoretical framework also using MTMM to test three hypothesised traits of linguistic, pragmatic & sociolinguistic competence (Bachman & Palmer, 1982). Their findings were also that a two-tier model fits best: grammatical and a sociolinguistic component. Haugh (1999), however, concluded that the factors were not well delineated along the lines of the Bachman and Palmer model and suggested that an interactive model may be more valid as one component may be dependent on a certain level of ability in another. He alludes to the technical difficulty in operationalising the construct, which has hindered much of the research, and this view is reiterated by Bachman, who comments that the instruments used were more complex than the traits they were trying to measure.

After years of discussion, the debate ended quietly. There is now generally consensus that communicative competence and proficiency can be equated with one another, with the communicative competence/communicative language ability frameworks providing the theory that underpins proficiency.

2.2 ELP in academic contexts

Having considered theories of ELP in SLA, we turn now to Academic English language proficiency (AELP), a critical attribute to academic success for EAL students at primary, secondary and tertiary levels of education. Although not the only success factor (Hill, Storch, & Lynch, 1999; Nagy & Townsend, 2012; Xu, 1991), it is commonly viewed as a keystone attribute requiring a threshold competence in EMI contexts (Sawir, Marginson, Forbes-Mewitt, Nyland & Rabia, 2012; Woodrow, 2006). Much research and literature related to the construct of AELP originates from work in the primary and secondary school sectors in the United States as a result of a long history of EAL immigrant children in US schools. Although there are obvious differences between how an L2 is acquired by children and adults, parallels might be drawn from this context.
2.2.1 Academic ELP in non-tertiary contexts

AELP has been described as “the centrepiece for academic success” for school-age children (Gottlieb & Ernst-Slavit, 2014, p.1). Francis, Rivera, Lesaux, Kieffer and Rivera (2006) go as far as to state that:

“mastery of academic language is arguably the single most important determinant of academic success for individual students. While other factors (e.g., motivation, persistence, quantitative skills) play important roles in the learning process, it is not possible to overstate the role that language plays in determining students’ success with academic content” (p.7).

The notion of AELP as a specialised ‘register’ developed from research in the 1970s yet there is still no clear definition of it (DiCerbo, Anstrom, Baker & Rivera, 2014; Nagy & Townsend, 2012; Snow & Ucelli, 2009) and few empirical investigations have attempted a systematic approach to describing the construct (Anstrom, DiCerbo, Butler, Katz, Millet & Rivera, 2010; DiCerbo et al., 2014; Francis, et al., 2006). Francis et al. (2006) claim that “most likely there will never be a single definition of Academic English” (p.12), due in part to the differing theoretical and disciplinary orientations of researchers. Some heuristic definitions have been attempted: Anstrom et al., (2010) and Hakuta, Goto Butler and Witt (2000), for example, define it very broadly as the language used in academic settings and for academic purposes. Cummins (2000) is more specific and states that it is “the ability to make complex meanings explicit in either oral or written modalities by means of language itself rather than by means of contextual or paralinguistic cues” (p.68). Chamot and O’Malley (1994) also highlight the spoken versus written forms, while adding lexical items and discourse structures to its composition. Chappelle (1998) takes a different view and speaks of the various ‘knowledges’ it encompasses: language knowledge together with the associated knowledge of the world and metacognitive strategies necessary to function effectively in the discourse domain of the school. In the TESOL
PreK-12 Standards (2006), it is defined as “the language used in the learning of academic content in formal schooling contexts; aspects of language strongly associated with literacy and academic achievement, including specialised academic terms or technical language” (p.117). Solórzano (2008) notes that it comprises academic communicative competence and sociopsychological characteristics as well as “higher order literacy skills that are dynamic, ever changing, and content related” (p.296). The literature agrees that language and literacy are closely related but not the same, and Cummins (2000) describes AELP as “expertise in understanding and using literacy-related aspects of language” (p.70).

Despite challenges to define AELP, there has been a need to operationalise it, and this has been attempted in the school context in various ways (Anstrom et al., 2010; Schleppegrell, 2012; Snow & Ucelli, 2009; Solomon & Rhodes, 1995). Snow and Ucelli (2009) found that dozens of traits have been identified as forming part of AELP though there is no consensus whether it is their frequency or their co-concurrence that matters most. Some researchers have highlighted the importance of functions (e.g. comparing or hypothesising) and have proposed taxonomies of them (Anstrom et al., 2010; Chamot & O’Malley, 1994; Cummins, 2000). While the literature is consistent that AELP cannot be reduced to a set of discrete components (Solórzano, 2008), several have posited the central role of lexical knowledge (Corson, 1997; Cummins, 2000; Francis et al., 2006; Halliday, 1989, 1994). Indeed, Anstrom et al. state that “the feature most addressed in the literature is vocabulary” (2010, p.13), often subdivided into non-academic, general academic and technical, with the added complexity of polysemy as a result of differing contexts. Cummins agrees, saying that “lexical knowledge is at the core of general academic language proficiency” (2000, p.138) and he suggests that the most promising measure to assess AELP is through the tapping of lexical knowledge. Grammatical features also receive attention – both from a traditional perspective (Celce-Murcia, 2002; Gottlieb & Ernst-Slavit, 2014), and from a functional perspective based on Halliday’s
Systemic Functional Linguistics (SFL) approach (Halliday, 1989, 1994). Length and complexity of the sentence, the prevalence of nominal groups, nominalisation, and embedded clauses have all been found to be key features of AELP (DiCerbo et al., 2014; Schleppegrell, 2012). As well as sentence level features, higher levels of discourse such as register and genre are also mentioned (DiCerbo et al., 2014; Gottlieb & Ernst-Slavit, 2014; Scarcella, 2003; Schleppegrell, 2012; Snow & Ucelli, 2009) with many viewing AELP as differentiated at the subdiscipline level (Gee, 2005, 2008; Shanahan & Shanahan, 2008). Most research into AELP for school-age children agrees that explicit instruction in the lower order lexical, grammatical and discourse features is required as these features function together to allow linguistic choices within a specific higher order context of use (Anstrom et al., 2010; Bailey, 2007; Chamot & O’Malley, 1994; Cummins, 2000; Francis et al., 2006; Scarcella, 2008; Snow & Ucelli, 2009; Solórzano, 2008). Context is central to most of the extant frameworks (Anstrom et al., 2010) and it has been said that “there is no universal structure of proficiency that can be defined outside of particular contexts” (Cummins, 2000, p.136).

BICS and CALP
In 1979, Cummins proposed a framework of proficiency which refuted the Unitary Trait Hypothesis and which came to have significant impact on educational policies and practices in the UK and North America. It comprised two components: Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP) (Cummins, 1984). In his view, BICS is acquired by everyone (to varying degrees and unless intellectually disabled) and is a surface manifestation of proficiency, whereas CALP is a deeper manipulative ability required for academic purposes. In Cummins’ view, “in academic contexts, certain aspects of language proficiency develop in specialized ways to become the major tool for meeting the cognitive and communicative demands of schooling” (1984, p.16). BICS is therefore both a pre-requisite for more specialised skills in an academic context but also a construct in its own right. Cummins justified this
distinction by showing that approximately five to seven years were required by immigrant students to approach grade norms in academic aspects of English (i.e. CALP), despite achieving appropriate conversational fluency (BICS) in a much shorter time (Cummins, 1984). Several studies have supported these findings (Cummins & Man, 2007; Greenberg Motamedi, 2015; Hakuta, et al., 2000; Kirkpatrick, 2012; Roessingh, Kover & Watt 2005; Zhang & Mi, 2010) with others suggesting an even longer timeframe (Shohamy, 2011; TESOL Association, 2006). Cummins later updated the terms but maintained that conversational proficiency (i.e. BICS) and academic proficiency (CALP) are separate and become differentiated as the level increases (Cummins, 2000). Though his distinction received criticism, it remains influential as does his view that there is a core general language proficiency (see figure 2.1) that draws on both conversational and academic proficiency with neither superior to the other.

Figure 2.1: Cummins model of core general language proficiency

More recently, Cummins (2000) described AELP along two intersecting continua, the horizontal continuum depicting the degree of contextual support provided, and the vertical continuum representing gradations of cognitive involvement. The four quadrants represent registers of language in different contexts as shown in figure 2.2:
Quadrant A, cognitively undemanding and context-embedded such as conversational skills, is said to develop quickly. Quadrant D, cognitively demanding and context-reduced such as writing in an academic context, is the most challenging to master as there is less support and higher cognitive demands. In this model, AELP is viewed not as a linear entity but as a multidimensional one, bound up with the cognitive demands of the task and the degree of support or abstraction inherent in the context. Cummins contends that his model of intersecting continua is consistent with other models and theories which also draw on highly contextualised versus the more abstract, including Vygotsky’s Zone of Proximal Development, Biber’s analysis of textual variation (1986) and Corson’s analysis of lexical differences (1997).

BICS/CALP was not without censure. Edelsky (in Edelskey, Hudelson, Altwerger, Flores, Barkin & Jilbert, 1983) criticised the distinction for ignoring its location in social practice and for promoting a ‘deficit model’. Others also disagreed with the model, positing that proficiency was
affected by socio-economic status, the sociolinguistic expectations of the teacher, native endowment and the approximation of Western middle class norms. Scarcella (2003), for example, rejected Cummins framework and proposed a model based on three factors: linguistic, cognitive, and socio-cultural/psychological, drawing on an existing theoretical model of academic literacy. Bailey and Heritage (2008) also proposed their own model, breaking AELP down into School Navigational Language (used for communication with peers and staff) and Curriculum Content Language (used for the process of learning and teaching). In the USA, there are also multiple frameworks in the primary and secondary school sectors at federal and state levels such as the Common Core State Standards (CCSS), TESOL PreK-12, and WIDA (Council of Chief State School Officers, 2012; Gottlieb, 2003; Sato, Lagunoff & Worth, 2008; TESOL, 2006), all of which describe multiple competences such as linguistic/grammatical, discourse, sociolinguistic or pragmatic, cognitive and metacognitive, and which note the centrality of context and discourse for meaning-making.

In summary, the scholarly literature in the school contexts has shown AELP to be a dynamic and challenging construct to define yet there is some consensus that it involves a complex relationship of numerous interacting factors or dimensions. Existing models emphasise social versus academic language, and foundational versus more advanced linguistic competence, which develop over time. Models highlight features at the word, sentence and discourse levels, which interact with higher order cognitive demands. Lexis, register and genre receive attention along with the importance of context. Regardless of the epistemological position of the researcher, the consensus view is that it is impossible to define AELP outside of the specific context of use and therefore there is no single ‘academic language’. Although a differing target population to tertiary students, much can be drawn on from the literature related to school-age English language learners: especially the view that academic language comprises multiple dimensions with differing demands, and is foundational to academic access and success.
2.2.2 Academic ELP in higher education

Challenges in defining AELP in higher education

As noted by Cho and Bridgeman, “undoubtedly, English language proficiency is a critical factor for the academic performance of non-native English speaking students in a setting where English is used for teaching and learning” (2012, p.422). In this section, we investigate how AELP is defined in higher education institutional policy documents and conceptualised in the research literature. “Defining a construct is no trivial matter” (Hulstijn, 2011, p.229), and indeed defining AELP in higher education seems to be as challenging as it was in the SLA literature. Murray (2010) describes it is a “rather nebulous, ill-defined concept” (p.57), while Xu (1990) contends that “language proficiency levels for academic purposes are difficult if not impossible to define operationally except in terms of scores on accepted tests” (p.9). Attempts have been made to supply heuristic definitions of the construct; Davies describes it as “the ability to operate successfully in the English used in the academic domain” (2008, p.1) and “the language of argument, of analysis, and of explanation and reporting…skilled literacy and the ability to move easily across skills” (Davies, 2007, p.85). Such broad definitions are inadequate and many have called for a detailed and agreed conceptual framework for the higher education context (Arkoudis, 2011; Dunworth, 2001; Dunworth et al., 2013). Yet many years after Xu’s comment, Dunworth noted that AELP still “does not necessarily have a shared meaning at a cross-institutional, intra-institutional or even intra-disciplinary level either in terms of the construct itself or of the level of the construct that is appropriate” (2001, p.6). A national report went as far as to state that a key issue is “a lack of consensus about the construct in question” (Dunworth et al., 2013, p.14). Given this lack of consensus, it is of interest to briefly consider how some higher education institutions define and refer to it.
Institutional definitions

At the research site, while admissions policy documents stipulate accepted minimums on standardised language proficiency tests and deemed equivalents, there is no definition or statement for what these minimums mean in performance terms. Information is provided on the international pages of the University website, indicating that assistance is given to international students, but that students are responsible for developing their ELP during their degree. It does not say how or to what standard. Oblique mention is also made of ELP as part of ‘communication skills’ in graduate attributes statements. This is the extent of the student-facing references to ELP. References are also made in some staff-facing documentation such as The Academic Plan, which states that the institution needs to ensure that international students enter the University with appropriate English standards (Griffith University, 2013). What ‘appropriate’ means and what level might enable success are not stipulated. Nor does it say how it will measure, monitor or develop these skills and there is no explicit mention of expected exit levels of ELP.

This is not an issue that is restricted to the research site. At the University of Queensland, a local sandstone University ranked in the top 100 globally, an internal report notes similar issues, noting the absence of a definition in its policy and recommending that “the revised policy should clearly define what UQ means by ELP” (Martin, 2011, p.13). This need for a definition may be related in part to the recent focus nationally described in Chapter 1, though it is not a new recommendation. In 2001, Dunworth suggested that Curtin University in Western Australia should devise statements of their definition and expectations of ELP, having found no statement, policy or public document describing an appropriate level of language use and no indication how the university admissions arrived at scores accepted for entry or statement for what constituted an appropriate level of proficiency. Personal communication with the author in 2012 revealed that a statement was still lacking. Lack of institutional definitions for ELP is, in fact, widespread.
(Dunworth et al., 2013), despite the national regulator calling for institutions to demonstrate:

how, and how effectively, expected ELP learning outcomes are established, monitored, assessed, and achieved throughout the course of study. This includes identifying the definitions of appropriate levels of English used for various cohorts of students (TEQSA, 2013, p. 4).

The use of test scores to define and refer to ELP

As these examples show, there is a lack of explicit statements or definitions of ELP at universities in Australia. As a result, institutions typically rely on IELTS scores as a default and vernacular referent for ELP levels, even when no test has actually been taken (Dunworth et al., 2013), and it is claimed that stakeholders may not fully understand what IELTS scores represent in real performance terms (Murray, 2011). Some experts claim that this use of IELTS scores for describing ELP is problematic because test scores are reductionist in nature and therefore not able to reflect the underlying complexity (Dunworth, 2001; Harper et al., 2011; O’Loughlin, 2011). However, this seems unfair criticism as the reporting mechanism of any test or framework is designed for practical application aimed at the non-expert end-user, which belies the inherent complexity. The issue is really one of test score use rather than with the reporting mechanisms. Test owners do indeed suggest monitoring, reviewing and considering numerous factors when setting standards but “no university in Australia follows the guidelines published by IELTS on appropriate entry scores” (Baird, 2010, p.8), which recommends IELTS 7.0 as an acceptable minimum for academic courses.

Assumptions have also been made that equivalence between standardised proficiency tests is possible and has been established (Dunworth, 2010). Research attempting to show equivalence between large-scale proficiency tests has resulted in the publication of inconsistent concordancing even by the key testing bodies (Cambridge English, 2011; ETS, 2010; Pearson, n.d.).
This underlines the challenge of comparing even a small number of quality general academic language proficiency tests. More problematically still, equivalence is assumed for non-test pathways, where language acquisition is assumed to have occurred by dint of undertaking an English medium of instruction course prior to the commencement of university studies. Such courses vary so considerably that they “add another layer of complexity to their linguistic preparedness” (Harper et al., 2011, p.38). Some research shows that students entering via such pathways are more at risk than those who gain entry by test pathways (AUQA, 2008; Oliver, Vanderford, et al., 2012). There is considerable difficulty in making meaningful comparison between various pathways in terms of ELP, and statements of minimum expectations (rather than test scores) might alleviate the issue. The use of independent tests to check students’ English language proficiency is, in fact, small and declining (Victorian Ombudsman, 2011, p.7). At the research site, for example, only 16% of students meet the language condition to enter the university by taking a formal proficiency test while at other Australian universities, it can be as low as 7% (Oliver, Vanderford, et al., 2012).

In sum, minimum standards at universities are stated by reference to test scores for entry, though these do not adhere to the test partners’ recommendations, and optimum levels are not stated. Progressive standards tend not to be set during the degree or an expectation of ELP levels by graduation. Whilst it is not possible or even desirable to demand that international students aim for ‘native speaker’ level proficiency (Benzie, 2010; Kirkpatrick & Sussex, 2012), what we mean by “functional proficiency” (Dunworth, 2001, p.166) or an acceptable level for graduates that is decoupled from the so-called native speaker ‘gold standard’ has not been articulated for university study.

**Terminology**

In documents that do attempt to reference language skills, one issue appears to be terminology. Where terms outside of test scores are used, loose and
somewhat interchangeable nomenclature is employed: competence, ability, proficiency, communication skills and academic literacy. Dunworth (2001) suggests that ‘proficiency’ and ‘competence’ are sometimes used interchangeably in admissions offices. Duff, too, uses a variety of terms, referring to ‘academic discourse’, ‘academic language’ and ‘academic literacies’ as synonymous and defining the notion/s as “genres, registers, graphics, linguistic structures, interactional patterns that are privileged, expected, cultivated, conventionalized or ritualized (2010, p.175). Confusion over terminology is evident even at government level. The DEEWR definition of proficiency provided in the GPPs is a rather vague description, which confuses - or at least conflates - aspects of ELP and Academic Literacy (Murray, 2012), though the definition does at least raise ELP beyond the sometimes narrowly held conception by non-linguists of the most visible but more mechanistic aspects of language related to sentence level grammatical competence:

The ability of students to use the English language to make and communicate meaning in spoken and written contexts while completing their university studies. Such uses may range from a simple task such as discussing work with fellow students, to complex tasks such as writing an academic paper or delivering a speech to a professional audience. This view of English language as the ability to organise language to carry out a variety of communication tasks distinguishes the use of English language proficiency from the narrow focus on language as a formal system concerned only with correct use of grammar and sentence structure. (DEEWR, 2009, p.1)

The definition also usefully contextualises ELP in the university setting. However, it is vague, oversimplified and aggregates aspects of ELP and university tasks. Some have criticised it for “competing views of English language proficiency: one of a reified threshold language proficiency and the other of language resources as communicative and developmental” (Harper et
al., 2011, p.41). Given the conflation with Academic Literacy, it is worth
considering how ELP and Academic Literacy overlap and interact, which is
considered in the next section as one approach in higher education.

2.3 Approaches and conceptual models in higher education

2.3.1 The Academic Literacies approach

The term ‘Academic Literacies’ comes from the New Literacy Studies in the
UK in the 1990s as well as Bazerman (1988) in the US. Lea & Street’s
canonical work on Academic Literacies (1998) defines it as “a variety of
communicative practices, including genres, fields and disciplines” which
requires students to “switch practices between one setting and another to
deploy a repertoire of linguistic practices appropriate to each setting” (1998,
p.159). It is said to require specialised vocabularies, concepts and knowledge,
genres, rhetorical structures, argument formulations and narrative devices.
The plural form (‘literacies’) highlights the belief that there is no single
literary practice in the academy, but rather that it is dependent on disciplinary
and social contexts (Zamel & Spack, 1998). Lea and Street’s framework
includes all three conceptions of the notion: study skills (mechanistic,
atomized skills), academic socialization (acculturation into the new academic
culture), and academic literacy, which encompasses the former two but adds
the negotiation of conflicting literacy practices, genre, social meaning and
identities and power relations (Hyland, 2006; Lea & Street, 2000, 2006).

The Academic Literacies model informs much language support and
development work in Australian universities and the distinction between ELP
and Academic Literacies continues to be deliberated, at times demonstrating
confusion about where one ends and the other begins. Dunworth (2001) states
that ELP and Academic Literacies overlap but differ and neither is a binary
state. Rather, she suggests that ELP is best viewed as a “contextually-specific
continuum, along which language users move at varying rates” (p.7). She
states that many students have issues with academic literacy but students with English as an additional language have a wider range of challenges, which implies that ELP is a different construct. Kettle (2011) also clearly separates the two constructs and states that “teaching for learning in higher education challenges the view that developing academic competence is primarily linked to English proficiency” (p.11). Arkoudis et al. (2012) describe Academic Literacy as a subset of ELP. Generally, the two are considered different constructs but inherently linked.

The Academic Literacies approach is not entirely reconciled to other approaches. For example, proponents of Academic Literacies have been said to dismiss the fields of genre/EAP because the latter are focused solely on EAL students and have a “textual bias and normative approach” (Wingate & Tribble, 2012, p.490). Wingate and Tribble go on to suggest that, in so doing, they ignore the founding principles of Applied Linguistics, and the considerable theory and research in the fields of genre/EAP. The Academic Literacies approach has also been criticised for its lack of pedagogical application and some have called for research-based guidelines and principles for application in more mainstream teaching in higher education (Lillis, 2006; Lillis & Scott, 2007). Research in this area is also based predominantly on small-scale case studies and ethnography (Wingate & Tribble, 2012). However, Wingate and Tribble suggest that genre/EAP and Academic Literacies share considerable common ground and that the principles could be fruitfully combined.

2.3.2 Models of AELP in higher education
Consideration is now given to models of AELP in higher education. Relatively few models have been proposed in this context. Cumming (2006) provided a model in which he plots course types and knowledge types along a continuum. Course types range from ESL pre-degree (“pre-sessional”) courses on the left through to bridging courses (e.g. EAP courses), academic
foundation courses and finally to mainstream university content courses on the right as shown in figure 2.3.

![Diagram showing the progression of knowledge types across different course types](image)

*Figure 2.3. Cumming’s knowledge continuum, 2006*

He suggests that language knowledge is the focus *particularly* for pre-sessional courses and then becomes implicit further along the continuum. Genre and rhetorical knowledge are activated along the continuum during bridging courses and gain increasing importance within academic foundation courses. In turn, genre and rhetorical knowledge become implicit in mainstream university courses, at which point content knowledge is predominant. Critical thinking, on the other hand, is said to span all four course types. Importantly, this model suggests that while some ‘knowledges’ become more implicit further along the continuum, development of language knowledge and genre/rhetorical knowledge does not cease at any stage. This model is largely an intuitive model of curriculum but appears to have had little traction.

The following models have received considerable attention in the Australian higher education context. The first is Murray’s tripartite division of competences, comprising Professional Literacies and Academic Literacy in addition to ELP as shown in figure 2.4 (2010, 2011).
Murray explains ELP by way of communicative competence, adhering to the seminal Canale/Swain and Bachman/Palmer models described in section 2.1.6, and specifically defining it as “a general competence in language (Murray, 2011, pp.235-236). In his view, these are generic abilities and skills that can be “cashed in” in any potential context and are pre-requisites to developing Academic Literacies and Professional Literacies. The second dimension, Academic Literacies, follows the Lea and Street (1998) definition cited above. He believes few students (domestic or international EAL) enter degree programs with these skills and states that high levels of ELP does not equate to well-developed academic literacy. Thirdly, Professional Literacies are described as including intercultural competence, good interpersonal skills, conversancy in the discourses and behaviours associated with particular domains, group skills, leadership skills and nonverbal communication skills. The three dimensions are inter-connected and interact and therefore Murray admits it is a rather artificial distinction. He sees development of the latter two literacies as the academics’ role, and suggests we should not assume them to be in place for any students, whether domestic or international. This view is supported in the Academic Literacies literature where all students are seen as novices to the academic discourse of the discipline (Wingate & Tribble, 2012). ELP, on the other hand, in his view, is a pre-requisite for developing the other two. The literature is unclear as to the amount of overlap between academic and professional discourse (Duff, 2010) but tends to agree they do differ (Benzie, 2010; Hyland, 2006).
Murray’s model has not been empirically validated, though it did open debate on the topic in Australia. A robust response by Harper, Prentice & Wilson critiqued the model for its “vertical conception of language development” that “suggests that there exists a threshold level which students must traverse in order to participate in academic or professional literacies” (2011, p.41). Oddly, Harper et al. do not believe that a minimum standard of ELP must be reached before students can participate in academic literacies. Their view is justified by the (incorrect) view that, if ELP were a pre-requisite, “it would seem logical to assume that the greater a student’s language proficiency on any given entry test, the greater the likelihood of success at university” (p.42).

They go on to cite inconclusive predictive validity studies in terms of correlations between test scores and academic success as evidence that entry scores do not guarantee success. This is true, but the position itself, while oft cited, is erroneous. Indeed, Ingram and Bayliss (2007) argue that “it is not surprising that attempts to correlate test scores with subsequent academic results have been inconsistent in their outcomes” (p.5) because IELTS (or indeed any test of language proficiency) predicts language behaviour in academic context, not academic performance. Dunworth (2001) agrees that weak predictive validity of IELTS and TOEFL is “spurious criticism” since a number of variables contribute to academic success (p.4). As Davies (2007) states, language is necessary but not a sufficient determinant because “intelligence, academic knowledge and ability, attitude and health contribute to academic success” (p.82).

The question should not be whether ELP predicts academic success but at what point ELP negatively impacts academic development and also at what point ELP no longer hinders it. Academic Literacies clearly cannot develop without some facility in the language used as the medium of instruction, but neither can ELP guarantee the development of Academic Literacies or academic success; that is, absence of ELP should guarantee failure in academic development in an English medium tertiary context. As Cho and Bridgeman (2012) put it: “there may be no direct correspondence between
language proficiency and academic performance beyond a certain level of language proficiency” (p.4). As Harper et al. point out themselves, “entry levels are a starting point for development rather than an end-point in themselves, and the English language capacities of students…need to be closely monitored and developed to ensure that the pathways are indeed “enabling (rather than “promising”) success” (Harper et al., 2011, p.43). The claim made by Criper and Davies (1998) below appears to be generally shared in the research literature:

Language plays a role but not a major dominant role in academic success once the minimum threshold of adequate proficiency has been reached. Thereafter it is individual non-linguistic characteristics, both cognitive and affective, that determine success. (p. 113).

While a minimum threshold appears key (Elder, Erlam, & von Randow, 2002), what this threshold is remains a contested and contentious issue.

Harper et al. (2011) presented an alternative to Murray’s three dimensions which itself builds on the Macken-Horarik, Devereux, Trimingham-Jack and Wilson (2006) model of tertiary literacy. Rather than a vertical progression, the model aims to show simultaneously development of everyday, academic and professional literacies via three overlapping circles as shown in figure 2.5. Each is said to have its own grammar, lexicon and genre but a generic core of knowledge and skills of English is also said to exist. They suggest that “students’ language resources develop not vertically as they progress through their studies but, rather, grow outwards from a grammatical core into all domains simultaneously, becoming constantly richer, more diverse, and more refined” (2011, p.46).
However, this model is also flawed in some respects and raises a number of issues. Harper et al. appear to be suggesting that academic literacies or professional literacies can develop concurrently with everyday literacies with no pre-requisite minimum competence. There seems to be a mistaken view that ELP is restricted to linguistic competence taught as a repertoire of rules and knowledge in de-contextualised settings. This presumption is demonstrated by Harper et al.’s comments about students being “‘proficient’ in the grammatical core” (p.46) beyond which

“[emphasis added] further de-contextualised grammatical instruction up to a higher level of proficiency will make little difference to their transition to university—at a certain point, further development is impossible without immersion in the language domain and supported development within the domain of language use: the discipline” (p.46)

Their view also departs from the conventional one of ELP developing “along a continuum from beginner to idealised (non-existent) native speaker” (Dunworth, 2001, p.26). Dunworth (2001) and Mahboob and Dutcher (2014) remind us that no-one is entirely proficient in all contexts at all times, a view that suggests that ELP development does not cease whether native speaker or non-native, but arguably develops concurrently with other literacies beyond a certain minimum threshold. However, Harper et al. do make the correct point that ELP is not “a quantifiable commodity or product that either you have, or

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**Figure 2.5.** A model of tertiary literacies, Harper, Prentice & Wilson, 2011
you do not have” (2011, p.43), and that we must beware of a remedial approach to the support of ELP in higher education, which is best supported in higher education through the discipline. These tripartite models offered by Murray and Harper et al. are echoed in Doiz et al. (2013) who posit the terms ‘vernacular’, ‘academic’ and ‘professional’ ELP in EMI contexts. In the view of Doiz et al., these are intersecting nested continua rather than opposites or theoretical endpoints, evidencing the multiple, complex and fluid relationship of dimensions of ELP.

A third model in the Australian context is the ELP developmental continuum developed by O’Loughlin and Arkoudis (Arkoudis, Baik & Richardson, 2012; Arkoudis, Baik, Bexley & Doughney, 2014). It differs from the Murray and Harper et al. models in that it focuses on stages of the student lifecycle: entry, experience (or during) and at exit (or graduation) as shown in figure 2.6. They describe ‘dimensions’ of ELP including general academic ability at entry, specific (disciplinary) academic ability during the degree and professional ability at exit, while social ‘communicative language ability’ is required at all three stages. Like Murray’s model, it makes passing mention of Bachman’s view of Communicative Language Ability. This continuum is also essentially based on intuition and common sense, though it does raise the key issue that focusing exclusively on ELP at entry is inadequate and that more explicit attention needs to be paid to ELP during degrees as well as to the standards reached by the point of exit. These distinctions are useful for the non-expert in ELT, though they are not theoretically or empirically motivated distinctions.
A further model has been proposed by Mahboob in his ‘language variation’ model (2014). It draws on the fields of Systemic Functional Linguistics (SFL), World Englishes and ELF in a global context that goes beyond the notions of ‘nativeness’ in order to explore specialized discourses such as academic, professional or technical in addition to everyday language. In Mahboob’s model, ‘language variation’ depends on three dimensions: 1) the users of English (i.e. their location and relationship to each other from low to high social distance), 2) the use of English (i.e. everyday/casual versus specialised/technical purposes) and, 3) the mode of communication in English (i.e. written/spoken) as shown in figure 2.7. Mahboob also suggests a fourth dimension not shown on the model: time. Language proficiency is seen as dynamic not static, reflected in the changing interactions between users/use/mode and time.
These three dimensions of use, user and mode interact to provide eight domains which represent how language varies:

1. Local/low social distance + everyday + oral
2. Local/low social distance + everyday + written
3. Local/low social distance + specialised + oral
4. Local/low social distance + specialised + written
5. Global/high social distance + everyday + oral
6. Global/high social distance + everyday + written
7. Global/high social distance + specialised + oral
8. Global/high social distance + specialised + written

The first four domains refer to local usage and low social distance. Mahboob suggests that general English language teaching tends to focus on domains one and two, the everyday discourses at the local levels with low social distance. Domains three and four are said to be under-researched as they have limited institutional relevance. The second four domains represent more
global usage with higher social distance. Domain five includes many (but not all) interactions in ELF while domain six would require standard English. In global/high social distance contexts, an assimilationist approach is needed to empower users and provide access to better opportunities in education, employment, and social mobility. It is domains seven and eight where more globally-oriented language in specialised contexts occurs. High social distance and specialised discourses in both the spoken and written modes function as the “gatekeeper to higher strata of academic and technical knowledge” (Mahboob, 2014, p.271) and has considerable power. Genre analysis, ESP and AELP reside in this domain as they need to be mobilised in the university setting. However, there are some issues with this model. For one, it conflates ‘local’ and ‘low social distance’ and also ‘global’ with ‘high social distance’, which may not always be the case, and it appears not to take digital communications into account. More importantly, the mechanics of language (the ‘linguistic’ or ‘grammatical’ competence of the communicative competence frameworks) are not present in this model, which seems to be rather a gap in a model which purports to explicate how language varies. The model is useful, however, in that it places context and purpose (user/use) at its core, and acknowledges the multi-faceted aspects of language use, including specialised discourses versus the everyday.

As can be seen, there is no agreed theoretical model for AELP in higher education. Despite this, it must be acknowledged that there is a considerable understanding and literature related to disciplinary differences in the higher education context. Taxonomies classifying academic domains are well-established (Biglan, 1973; Schommer-Aikins, Duell, & Barker, 2003), for example. There is also considerable research into the written discourse of the professions compared to the academy, which has similarly found literary practices to be context-specific and highly situated (Bhatia, 1993, 2010; Dias, Freedman, Medway & Paré 1999; Freedman & Adams, 1996; Moore, Morton & Wallis, 2015; Parkinson, 2013). The notion that academic discourse differs by discipline is uncontested as “academic writing is not a single
undifferentiated mass, but a variety of subject-specific literacies” (Hyland, 2002, p.352). Indeed, it is precisely through the differentiated academic discourse that knowledge itself is constructed, problematised and argued and its epistemic conventions conveyed (Hyland, 2011; Nesi & Gardner, 2012). Dunworth and Kirkpatrick (2003) report numerous studies showing how academic reading and writing practices differ across disciplines, for example. Discourse analysis, genre analysis (Swalesian and Hallidayan) and linguistic corpora have been used for several decades to analyse and map schematic structures, conventionalised forms and elements of recurrent patterning in text (Biber, 2006; Gardner, 2012; Halliday, 1978, 1994; Halliday & Hasan, 1985; Hyland, 2011, Hyon, 1996; Swales, 1990, 1998, 2004). Although not all agree that it is the role of the TESOL specialist to know and teach such disciplinary differences (Spack, 1988), the analysis of academic discourse within disciplines is certainly not a new venture. Given this, it is perhaps surprising that there is no accepted framework which describes and defines what English language proficiency is in the higher education academic domain.

2.4 ELP at and beyond graduation

2.4.1 ELP and academic outcomes
The literature is clear that ELP is a critical factor for academic performance in an English medium of instruction context (Arkoudis, 2014; Cho & Bridgeman, 2012; Oliver, Vanderford et al., 2012b; Phakiti, Hirsh & Woodrow, 2013) and research studies investigating this relationship are thus of interest. To date, only one published study has reported the correlation between graduating ELP and GPA (Craven, 2012) (see section 2.4.2). However, there is a plethora of predictive validity studies investigating correlations between entry tests scores and subsequent academic performance. A few have found little or no correlation between test score GPA (Cotton & Conrow, 1998; Dooey & Oliver, 2002; Oliver, Vanderford al., 2012), although Cho & Bridgeman (2012) suggest that even a small correlation might indicate a meaningful relationship. Many studies have
found a moderate or large predictive effect between test scores and outcomes as measured by GPA (Cho & Bridgeman, 2012; Criper & Davies, 1988; Feast, 2002; Humphreys, Haugh, Fenton-Smith, Lobo, Michael & Walkinshaw, 2012; Ingram & Bayliss, 2007, Kerstjens & Nery, 2000; Light, Xu, Mossop, 1987; Maleki & Zangani, 2007; Phakiti et al., 2013; Ushioda Harsch, 2011; Woodrow, 2006). O’Loughlin & Arkoudis (2009) suggest macro skill scores are more meaningful than aggregate overall scores and most studies do report by skill, generally finding the best correlation with GPA to be with Reading. Bridgeman, Cho and DiPetro (2015) also note the importance of separating samples into meaningful subgroups, such as by language or discipline, because more significance can be found. Some report the amount of statistical variance in GPA that can be explained by ELP, which varies between 10% and 40% (Criper & Davies, 1988; Phakiti et al., 2013; Ushioda & Harsch, 2011). McKay (2014) notes that initial proficiency scores are the greatest predictor of all variables, lending support to the requirement of a threshold level to benefit from EMI instruction. ELP has been identified as one critical factor, non-linguistic factors such as motivation and self-efficacy are also said to be significant - and possibly more important - in determining and accounting for academic success (Cotton & Conrow, 1998; Kerstjens & Nery, 2000; Murray, Cruikshank & Cross, 2014; Oliver, Dooey & Rochecouste, 2012; Phakiti, 2008; Phakiti et al., 2013; Storch & Hill, 2008; Woodrow, 2006). A considerable amount of research indicates that outcomes are influenced by a wide range of interacting variables in addition to ELP, including social and individual factors (Avdi, 2011, Cummins & Man Yee-Fun, 2007; Duff, 2007, 2010; Rochecouste, Oliver, Mulligan & Davies, 2010; O’Loughlin & Arkoudis, 2009).

2.4.2 Measuring graduating ELP by exit testing

The GPP report explicitly stated that English language proficiency is one part of the wider graduate attribute agenda but that it is treated as a ‘taken for granted’ element in communication skills (DEEWR, 2009, Martin, 2011). Some institutions have attempted to address this by testing ELP at
Although exit testing is not currently widespread, there are limited examples from Hong Kong, Taiwan and Australia.

Hong Kong was the first location to initiate largescale exit testing as a result of a perceived decline in the ELP of its graduates (Berry & Lewkowicz, 2000; Berry & McNeill, 2005; Gan, 2009; Qi, 2004, 2005; Qian, 2007). The University Grants Commission approved the voluntary use of IELTS Academic in 2002 and funded it at eight EMI universities via the Common English Proficiency Assessment Scheme (CEPAS). The international test was favoured (even by surveyed students) over the Graduating Students’ Language Proficiency Assessment (GSLPA), which had been purposely designed for testing graduating proficiency in the Hong Kong context (Chan, 2002; Qian, 2007). From 2002 to 2007, mean IELTS Overall scores of graduates accessing the test improved from IELTS 6.46 to 6.64. For a variety of reasons, this scheme was phased out in 2013, reportedly because it had achieved its aims. Commentary in the scholarly literature from Hong Kong suggests that exit testing is potentially valuable but needs to be managed with caution to avoid negative washback, and alternatives to testing were preferred and proposed (Berry & Lewkowicz, 2000).

In Taiwan, due to similar concerns over deteriorating language abilities of university graduates, the Ministry of Education has encouraged universities to set thresholds of language proficiency since 2003 (Hsu, 2009, Pan, 2009; Pan & Newfields, 2011). A variety of tests is accepted such as TOEFL, TOEIC and IELTS as well as the locally developed General English Proficiency Test (GEPT) (Gong, 2009, Pan, 2009). Although the was unable to make it an island-wide mandatory requirement, the Ministry Education uses pass rates as an indicator of a university’s performance, and set an aspirational goal of 50% of students exiting with the requisite (‘intermediate’) standard. However, few universities were able to evidence more than 30% of their graduates attaining the standard (Pan, 2009). At the macro level, the initiative was viewed positively by administrators,
and even students (Pan, 2009), yet in practice, it was found that the effect on ELP outcomes was superficial rather than substantial (Hsu, 2009; Pan & Newfields, 2011; Tsai, 2009). Concerns over graduating ELP in Taiwan, however, continue (Focus Taiwan, 2015).

Three Australian universities have implemented exit testing in recent years, all using IELTS. Griffith University undertook initial internal research in 2007 supported by a grant from IELTS Australia (Humphreys & Mousavi, 2010), and institution-wide voluntary and subsidised exit testing under the name ‘IELTS4grads’ was implemented in 2008 as one component of the broader Griffith English Language Enhancement Strategy (Griffith University, 2015a; IELTS4grads, n.d.). Outcomes from the initiative have been reported to University committees since inception (Humphreys, 2011; 2012; 2013) and Chapter 6 of this thesis presents further research from this context. The University of Queensland implemented the Graduate Exit IELTS Test in 2008, subsidising the test fee for both the General Training and Academic version (University of Queensland, 2012a; University of Queensland, 2012b). Martin (2011) stated that graduates from the University of Queensland should be aiming for IELTS 7.5, which “corresponds to current (bachelor) graduate attributes to convey ideas clearly and fluently in both written and spoken forms” (p.74). It is not further articulated how this standard was determined or whether graduates are attaining it. In 2012, the University of New England also commenced the provision of a free exit test for its graduates using IELTS Academic (UNE, 2015). No information or published research literature is available in the public domain from either of these institutions so outcomes and impact cannot be further commented upon. The University of Melbourne and University of Technology Sydney (UTS) have conducted ad-hoc exit tests for research purposes (discussed below) and it is possible that other universities have undertaken similar research that remains unpublished, perhaps due to the commercial-in-confidence nature of the data.
In the published research literature in Australia, two studies have traced English proficiency of EAL students over the course of an entire university degree with official IELTS test scores using a test-retest design (O’Loughlin & Arkoudis, 2009; Craven, 2012). The much-cited O’Loughlin & Arkoudis study conducted at Melbourne University found considerable variability in scores with some participants scoring below the requisite level to enter their degree program at graduation. The strongest skill on average was Listening, the weakest Writing and the greatest score gains were typically in Listening and Reading. Speaking was not found to correlate with the other three skills. The researchers conclude that improvement in ELP during degrees cannot be assumed, although undergraduates saw greater gains than postgraduates. Despite this small gains, interview data with students revealed that even participants with no overall score gain believed their ELP had improved, perhaps in ways not measured by the IELTS test. The researchers conclude that student agency is critical for development, and that improvement is related to the amount of support students seek within the university and contact with English outside of it.

The only recent study to investigate any relationship between graduating IELTS scores and Grade Point Average (GPA) was Craven’s study of undergraduates at University of Technology, Sydney (UTS) (2012). She found no clear relationship between IELTS exiting scores and GPA, though the sample was small (n = 40), suggesting that the matter warranted further research with a larger sample. Like the O’Loughlin and Arkoudis study, findings demonstrated strong variability in IELTS outcomes, with the greatest average gains in Listening and Reading and non-significant gains in Writing or Speaking. She also found that some students made no progress between pre- and post-testing and with no clear predictor for improvement, and highlights the challenge of reaching IELTS 7.0. Despite these outcomes, again, all of the students in the study believed they had improved, distinguishing between what IELTS tested and their own view of ELP, though many commented that they were able to transfer skills they had
acquired in their degree subjects to the IELTS test. Craven notes the importance of student agency for ELP development.

A further study to investigate graduating ELP in the Australian context used the Diagnostic English Language Assessment (DELA). Knoch, Rouhshad, Oon and Storch (2015) focused on change in the writing skill over a three-year undergraduate degree and found that, while fluency in writing improved significantly, accuracy, grammatical and lexical complexity as well as global scores for writing fell short of significance. The researchers conclude from the interview data that this lack of improvement is likely due to the limited amount of extensive writing that students are required to produce during their degree programs, echoing a finding from the O’Loughlin and Arkoudis study. Limited feedback on such linguistic features was also noted as a contributory factor. The Knoch et al. study also reports that 72% of the students in the study had expected their writing to improve, showing a consistent mismatch between perceived and measurable graduating ELP.

It must be noted that the samples in all of these studies were relatively small \( (n = <70) \) due to practical constraints. Additionally, participants were recruited to take the test for research purposes, meaning that motivation to score well may not have been optimised. In addition to these studies, others have investigated ELP improvement over one year or one semester of study and report similar limited gains (Knoch, Rouhshad & Storch, 2014; Humphreys et al., 2012; Storch & Hill, 2008). Overall, the extant literature reveals that, while some students do see score gain, there is no guarantee improvement will occur during higher education studies as measured by instruments. These findings are consistent with studies outside of the higher education context, which have shown that proficiency gains and “improvements seen in mean scores do not apply equally at all band levels” (Green, 2005, p.11). Research consistently shows that improvement occurs more easily at lower levels of proficiency, with IELTS 6.0 operating as a
threshold or plateau level beyond which it is hard to progress (Craven, 2012; Elder & O’Loughlin, 2003; Humphreys & Mousavi, 2010; O’Loughlin & Arkoudis, 2009). There is also consistent evidence in the broader literature the role of student motivation and agency in test outcomes (Avdi, 2011; Cotton & Conrow, 1998; Elder & O’Loughlin, 2003; Ingram & Bayliss, 2007; Kerstjen & Nery, 2000; Light et al., 1987).

Despite the above examples of exit testing in the research literature, there are mixed views on this practice in the English language testing community. Noted benefits include consistent cross-program or cross-institutional quantitative evidence of ELP outcomes where a single instrument is used (Arkoudis & Doughney, 2014; Humphreys & Gribble, 2013). Testing has also been said to externalise the assessment to professional test developers using instruments whose reporting mechanisms are understood by a variety of stakeholders internationally, and which have face validity (Humphreys & Gribble, 2013). However, there is the vexed question of requiring students to demonstrate ELP when they have otherwise successfully completed their degree (O’Loughlin & Arkoudis, 2009). A further argument against it is that testing per se will not develop language competence, though it may have washback on learning and teaching (Humphreys & Gribble, 2013). It has also been suggested that the adoption of a single test may lead to reductionism (Dunworth, 2001; Shohamy, 2007b) and that assessing skills within the discipline may be a more effective approach. Arkoudis goes as far as to say that any kind of testing that is not connected directly to disciplinary learning will not pass muster (2011).

The main area of concern for those against the use of large-scale proficiency tests at graduation or for entry to the workplace is around validity (Arkoudis & Doughney, 2014; Hsu, 2009; O’Loughlin, 2008). O’Loughlin (2008) that IELTS and TOEFL have been employed for the accreditation of health professionals and proposed as university exit tests without any serious attempt to validate them for such purposes, and this is considered by some
language-testing specialists to be unethical. Other experts claim that a academic test such as IELTS can be potentially generalisable to any type of academic language use and the test developers of IELTS deliberately eschewed specificity for this reason (Davies, 2008). Others suggest that a generic test may not provide participants with opportunities to display discipline-specific language acquired during their studies or tap into the domains that they have learnt (Knoch et al., 2015), though this raises the of whether we are interested in testing proficiency or achievement. Arkoudis (2010) suggested that IELTS has been filling the gap by default in Australia because there is no agreed framework or set of standards in the sector, and maintains that this is problematic because we do not know whether IELTS “a genuine indicator of graduates' language-readiness for their careers and professions”. The response from IELTS Australia to the above comment in the national press asserted that “IELTS does not claim to be an indicator of graduates' language readiness for their chosen careers and professions [because] there is a range of factors that contribute to work readiness” (Belleville, 2010). Language testing experts certainly argue that consequential validity needs to be considered (Bachman & Palmer, 2010; Kane, 2013; McNamara & Roever, 2006; Messick, 1989) and that tests should not be utilised purely as policy tools (Shohamy, 2007a; Shohamy, 2007b; Shohamy & McNamara, 2009; TEQSA, 2011). Mounting concern about the increasing use of tests for exit testing and professional workplace readiness has resulted in the publication of numerous research studies (Merrifield, 2011; Moore et al., 2015; Read & Wette, 2009) with several more forthcoming (Blackmore, Farrell, Morissey, Gribble, in preparation; Knoch, May, Macqueen, Pill, Storch, in preparation; Merrifield, in preparation).

One such study (Moore et al., 2015) uses domain analysis and modelling to compare the literacy practices required of graduates in professional work the skills tested in the Reading and Writing components of the IELTS test. Moore et al. identify convergence and divergence between the functions and
qualities in the two domains and conclude that, while a generic test such as IELTS does not - and cannot - test the unique literacies of particular professions, it can provide a generic experience around some of the broad processes of professional work. They comment that IELTS evidences coverage of many of the threshold skills that employers seek, and make the point that, just as students entering university will require and develop domain-specific skills, so too will new graduates once in the workplace. They go on to comment that tests cannot reasonably be expected to mirror the precise discourse requirements of all target domains of use because of the tailored circumstances and audiences. As there is no such thing as generic professional knowledge, they suggest that identifying “rhetorical overlap” (Moore et al., 2015, p.39) between the academic and professional domains might be the most achievable option for test content. Related studies that one issue is employer stakeholders, who have limited assessment literacy, assuming that an ELP test is a standalone predictor of ability in academic or professional communication, thereby confounding ELP with professional knowledge and skills (Merrifield, 2011; Moore et al., 2015; Read & Wette, 2009; Wette, 2011, 2012). Existing studies in this area conclude that further research is required to validate IELTS for such but that general tests of ELP might be useful as one source of evidence of work-readiness.

This leads to consideration of Language for Specific Purposes (LSP) testing in lieu of generic instruments. Few quality discipline-specific or occupation-specific instruments currently exist. Notable exceptions include the Occupational English Test (OET, 2014) created for the medical professions (and under development for the field of engineering), and a number of specific-purposes exams administered by Cambridge English Language Assessment (CELA) in the fields of business, finance and law (CELA, 2015a). A fundamental issue in testing for specific purposes, though, is where to place the test on the specificity-generalisability spectrum since the more specific the test, the less possible it is to generalise to other language use
domains (Bachman & Palmer, 2010; Douglas, 2000; Ingham & Thighe, 2006; Taylor & Pill, 2013). Another challenge is that research has found limited evidence that LSP tests are more effective than generic ones in testing the ability to perform in specified contexts (Read, 2015; Read & Wette, 2009; Taylor & Pill, 2014), due in part to the interaction between background content knowledge and language proficiency and because it is impossible to sample for every eventuality. Additionally, unless tests are based on the underlying construct and developed by a single test owner, rigorous and dependable equivalences across LSP instruments are fraught if not impossible, which has been said to make standard setting and of outcomes difficult at best and incommensurate at worst (Arkoudis et al., 2012; Chalhoub-Deville & Deville, 1999; Murray & Arkoudis, 2013). There are also practical constraints: even a high quality adaptive test such as BULATS (2015), designed by one of the most well-regarded testing bodies test the language of business and the workplace, has not gained traction in market, and its multilingual and paper-based versions are currently being phased out (CELA, 2015b). In Australia, the specialised ISLPR test (n.d), once accepted by numerous boards, councils and universities nationally, has fallen into relative disuse. This shows that testing is a demand-driven business; development and delivery costs for discipline-specific testing are high and a viable candidature is required for sustainability.

In sum, LSP tests yield problems of specificity, comparability, and practicality. Due to such issues, as demand for the assurance of graduates’ ELP by governments, immigration departments, businesses and the wider community has increased (Oliver, 2011; Saville, 2006), generic large-scale English language proficiency tests have emerged as the tests of choice for professional registration (CELA, 2015c) (see also Appendix A), visa applications to immigration departments in Australia, the UK, Canada, and New Zealand (CIC, 2015; DIBP, 2015; INZ, 2015; UKVI, 2015), as well as for university exit testing.
2.4.3 Measuring graduating ELP using other means

Many have suggested using alternative means to testing as evidence of graduating ELP. Individual universities have attempted to articulate the standard that graduates should reach through policy statements (University of Canberra, 2012), though this alone will not impact outcomes. Others have developed frameworks of standards comprising incremental goals over the course of the degree program to scaffold and evaluate development (Barrett-Lennard, Chalmers, Longnecker, 2011; Chalmers, Barrett-Lennard, Longnecker, 2010; Harper, 2011). Some have devised templates for the mapping of Course Learning Outcomes, including communication skills, to broader graduate outcomes, in which the required standard can be articulated (Deakin University, 2013). Such approaches have been lauded as they ensure ELP is integral rather than peripheral to disciplinary studies, making it part of the quality assurance process (Arkoudis, 2014; Arkoudis et al., 2012), but it has also been identified as requiring institutional commitment, considerable resources and training of academics (Humphreys & Gribble, 2013). Capstone courses in the final year of undergraduate programs have also been mooted as one way to evidence the culmination of learning (University of Canberra, 2012), though this would require collaboration between discipline and academic language and learning experts should ELP be evaluated. Berry and Lewkovicz (2000) suggested a language portfolio which gathers evidence across the degree as an alternative to an exit test in the Hong Kong context. However, portfolios are time-consuming, difficult to rate in a standardised manner and may lead to academic integrity concerns. Another suggestion has been to build ELP into assessment criteria with progressively higher expectations across degrees (Arkoudis, 2014; Arkoudis et al., 2012; Arkoudis & Doughney, 2014). This approach has the potential for positive washback but such a massive undertaking comes with several challenges as well as practical issues, including identifying the skills and knowledge expected at each stage and for each discipline, the responsibility for writing the criteria, and ensuring consistent application of the standard by academics who are not experts in evaluating ELP.
There have also been calls in recent years in Australia and beyond for sustainable whole-of-university approaches to the embedding and evaluating of ELP within disciplinary learning (Arkoudis, 2014; Dunworth, Drury, Kralik & Moore, 2014; Gunn, Hearne, & Sibthorpe, 2011; Harper, 2013; Kennelly, Maldoni, & Davies, 2010; Murray & Nallaya, 2014; Sheridan, 2011; Wingate, 2006), including suggestions that all staff should have a responsibility for its development, distributed according to their role (Arkoudis, 2014). Recently, it has been suggested that ELP should be linked to an employability framework in order to get traction and also so that institutions might provide evidence that their graduates develop such skills during their degrees (Arkoudis et al., 2014). Yet despite considerable in-degree support offered to EAL students (Arkoudis et al., 2014; Dunworth, 2013; Dunworth et al., 2014), there is little evidence of institution-wide approaches to date in Australia or elsewhere (Fenton-Smith, Humphreys, Walkinshaw, Michael, & Lobo, 2015), and it has been suggested that a fundamental institutional shift of this nature is stymied by the challenges of implementation (Dunworth et al., 2014; Wingate, 2006). None of the above alternatives have therefore gained substantial traction and in most higher education institutions in Australia, ELP is not currently formally measured or evaluated.

2.4.4 ELP beyond graduation
There is a plethora of research indicating that English language competency is not only critical for academic success but is also closely linked to the successful transition of Australian international graduates into the labour market (Arkoudis et al., 2009; Arkoudis et al., 2014; Birrell, 2006; DEEWR, 2009; Hawthorne & To, 2014; Robertson, 2011). Experts suggest that insufficient consideration has been given to the English language of graduates and that “few measures are in place to ensure that graduating students have attained a level of proficiency that employers will accept”
(Barrett-Lennard, et al., 2011, p.103). Stappenbelt (2008) concurs, stating that:

“universities may not be doing enough to ensure that international students improve their English language levels to professional standards [and] it is a great disservice to international students if they were not enabled to develop adequate English language skills for professional employment in Australia by the time they graduate, should they so desire it” (p.116).

The findings of the Birrell Report (2006) (see Chapter 1) resulted in a revision to the selection criteria for graduate skilled migration, including increased English requirements because its critical role had been noted for both employment and migration (Hawthorne & To, 2014). Poor employability outcomes for EAL graduates continue to be cited in the research in Australia (Gribble, 2014; Hawthorne, 2010; Hawthorne & To, 2014; Humphreys & Gribble, 2013) and other contexts (Arthur & Flynn, 2012; Atwood, 2014; Li & Yang, 2013). Indeed, expert demographers have found that no other single factor has greater statistical significance than language ability in determining early employment outcomes (Hawthorne, 2010; Hawthorne & To, 2014). A notable example is that only 41% of international business/commerce undergraduates were in full-time employment nationally compared to 91% of their domestic counterparts, with students from non-Commonwealth countries facing the greatest issues (Hawthorne & To, 2014). This has been called the “gap in the post-study work promise” as some employers do not consider international students as a talent resource (Lawrence, 2015). Concerns about employability of EAL graduates in the professional workforce have led to the introduction of a number of measures designed to improve their outcomes such as the government-funded Professional Year Program (CPA, 2015). Similar issues are echoed elsewhere: Arthur and Flynn (2012) document unmet employment expectations of EAL students in Canada, for example.
Employers seek evidence of a graduate’s communication skills and have been found to highly value ELP as one component (AEI, 2010; Eurobarometer, 2010; Graduate Careers Australia, 2012; Gribble, 2014; Hyland, 2006). The same attributes are repeatedly cited as vital: strong written, interpersonal and verbal communication skills as well as evidence of teamwork skills (Arkoudis, Hawthorne, Baik, O’Loughlin, Leach & Bexley, 2009; BCA, 2011; Blackmore, Farrell, Devlin, Arber, Gribble & Rahimi, 2010-2012). In one study, over 70% of employers both onshore and offshore rated ELP and communication skills as the most important attributes whereas only 19% of international students rated ELP as a skill that employers were looking for, evidence of considerable mismatch in views between these two stakeholders (Arkoudis et al., 2009). Employers also believe more needs to be done to improve such skills (Shah & Nair, 2011; Whelan, Oliver, Hunt, Hammer, Jones, & Pearce, 2010).

The literature therefore notes concern over the ELP outcomes of EAL graduates and the challenges of evaluating it, which has resulted in inconsistent approaches to dealing with the issue. While exit testing is certainly not viewed as a panacea, it is considered by some to be an adequate indicator of readiness to enter a domain of practice (Taylor, 2007), and researchers have suggested that it may have a role as part of a multi-pronged approach to assessing outcomes at graduation (Arkoudis & Doughney, 2014; Hsu, 2009; Read & Wette, 2009).

2.5 Student perceptions of ELP

2.5.1 Definitions and scales
This review now turns to the conceptualisations of the key stakeholder: the student. Notions of conceptualisations, perceptions or beliefs related to language learning are common in the scholarly literature. In their comprehensive overview, Bernat and Gvozdenko (2005) state that definitions of beliefs vary but
“the perceptions, beliefs, attitudes and metacognitive knowledge that students bring with them to the learning situation have been recognised as a significant contributing factor in the learning process and ultimate success” (p.1).

Benson and Lor (1999) differentiate ‘conception’ from ‘belief’. They posit that to modify a belief, students must modify the underlying conception on which it is based. In this way, they suggest that conception is a higher order construct, which conditions lower order beliefs. Bell, McCallum, Kirk, Sager Brown, Fuller and Scott (2009) recommend using the term ‘attitudes’ for all such notions. Others do not make this distinction and the terms tend to be used interchangeably.

Research into language learning beliefs began in earnest in the eighties, utilising instruments and scales such as the Attitudes and Motivation Test Battery (AMTB) (Gardner, 1985; Tremblay & Gardner, 1995), and the Beliefs About Language Learning Inventory (BALLI) (Horwitz, 1988)⁴. These two scales are considered the inception of research into learner beliefs and much of the literature on this topic originates from the period when such scales were popular (Bernat, 2006). Several studies in the SLA literature show that students have inaccurate beliefs or misconceptions about language learning, and such beliefs can be a possible impediment to their learning (Horwitz, 1988; Mantle-Bromley, 1995; Peacock, 1999). Mori (1999) and Ehrman and Oxford (1995) found that beliefs positively impact language learning, though Tanaka and Ellis (2003) found no relationship between beliefs and changes in proficiency. Numerous studies have shown that the more linguistically proficient the learner, the more realistic and/or positive the reported beliefs (Huang & Tsai, 2003; Peacock, 1999; Mantle-Bromley, 1995; Tanaka & Ellis, 2003). Research has also consistently shown that students tend to over-estimate their abilities (Bandura, 1989; MacIntyre, Noels & Clement, 1997; Taillefer, 2007). Indeed, Gardner (1995) stated that

⁴ See Appendix B for a summary of the key instruments and scales related to measuring beliefs about language learning.
“self-confidence…is usually assessed with measures of perceived proficiency” (1995, p.507).

Much of the research is based on self-reported language proficiency, thus relying on students’ perceived proficiency rather than actual (Cubukcu, 2008; MacIntyre et al., 1997; O’Reilly, Ryan, Hickey, 2010; Peacock, 1999; Tremblay & Gardner, 1995; Yeh & Inose, 2003). Ellis (2004) questions this use of self-report data and asks “to what extent learners are sufficiently aware of their affective states and cognitive processes to report on them” (p.674). Similarly, MacIntyre et al. (1997) and Ehrman and Oxford (1995) raise the issue of Social Desirability Response Bias (SDRB) when self-reported proficiency is used, though Tremblay and Gardner suggest that the effects may be small (1995, p.517).

2.5.2 Student perceptions in the SLA literature

Numerous studies have investigated what impacts language learning beliefs. Horwitz found considerable commonality across cultures and no clear-cut differences in beliefs by cultural group (1999); indeed she found that within-culture differences accounted for as much variation as between-group differences. Bernat (2006) also found that beliefs do not vary by contextual setting but rather by individuals’ complex metacognitive structure. Interestingly, Peacock (1999) and Siebert (2003) noted that gender can impact self-report accuracy with females generally more accurate than males. However, overall, it appears that differing beliefs can be more easily attributed to the individual than the context or cultural background.

Motivation has been found to be a key factor impacting learning including L2 success (Dornyei, 2005; Oxford & Shearin, 1994; Tsui, 1992). Research into motivation in SLA was initiated in the late fifties by the social psychologists Gardner and Lambert, who distinguished motivation from aptitude, declaring that “attitudes and motivation (along with other variables…) affect language achievement” (Gardner & Lambert, 1972, p.52). Gardner’s
Socio-educational Model (1985) defined motivation as comprising effort, desire and satisfaction and notably distinguished instrumental and integrative motivation. This model is drawn upon heavily in the literature (Cid, Granena & Tragant, 2009; Horwitz, 2000; MacIntyre, 2007; Oxford & Shearin, 1994). Gardner and Tremblay extended the original model, suggesting that persistence, attention, goal-specificity and causal attributions (internal factors such as ability and effort, and external factors such as luck and task difficulty) also affect motivation as “no single motivational theory…captures the vastness of what we call ‘motivation’” (Tremblay & Gardner 1995, p.505). Indeed, Dornyei (in Ellis, 2004) identified ten contemporary theories of motivation including the following labels for motivational constructs: attribution theory, goal theory, willingness to communicate theory, and value expectancy theory. More recently, Dornyei, MacIntyre and Henry (2015) have posited Dynamic Systems Theory (DST) as the epistemological basis for conceptualizing the complexities of motivation and its impact on SLA. DST abandons the notion of single and linear causality, accepting not only interindividual differences in motivation, but also intraindividual differences. This theory views motivation as “emergent, dynamic and context-dependent rather than as absolute” (Hiver, 2015, p.25), that ebbs and flows rather than being a static entity. This matches observations and learners’ own reports of random and iterative motivational dispositions (Dornyei et al., 2015). It is also highly sensitive to initial conditions (Clement, Dornyei & Noels, 1994; Clement, Noels & Deneault, 2001), which then have vast implications for future trajectories similar to the so-called ‘butterfly effect’, because, in complex systems, even tiny perturbations can generate wholly disproportionate effects (Dornyei et al., 2015). Motivation appears to impact beliefs about language learning, though its link to actual proficiency (as opposed to perceived proficiency) does not receive much attention in the literature.

Self-efficacy, one component of Bandura’s Social Cognitive Theory (Bandura, 1999) is also a prominent theme in the literature and is said to impact beliefs about language learning. Wood and Bandura defined it thus:
“perceived self-efficacy concerns people’s beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives” (1989, p.364), noting that it is bound up with other determinants such as human agency, perceptions, beliefs and motivation. Bridgeman et al. (2015) refer to this notion as ‘grit’, seeing it as a kind of resilience. Much research correlates self-efficacy with academic achievement in numerous contexts (Cubukcu, 2008; Galbreath & Jernigan, 2004; Klassen, 2004; Magogwe & Oliver, 2007; Mills, Pajares & Herron, 2006; Pajares, 1995, 2003; Rahimi & Abedini, 2009; Rushi, 2007; Schunk, 2010; Schunk & Pajares, 2005; Schwarzer, 1999; Templin, Guile, Okuma, 2001; Wong, 2005; Zimmerman & Bandura, 1994). For example, in the SLA literature, Lin & Betz (2009) found self-efficacy to be positively related to ELP. Zimmerman and Bandura (1994) in their study of 95 college freshman found that over 30% of the variance in grades was attributable to perceived academic self-efficacy and personal goal-setting. Research also shows that perceptions of self-efficacy are constantly changing, deemed to differ across domains and to be task-specific (Pajares, 1995, 2003). Experts generally claim that self-efficacy is universal (Bandura, 1999; Lin & Betz, 2009; Schwarzer, 1999), though some have posited that self-efficacy is culturally-biased and may not apply to collectivist cultures (Rushi, 2007). Undoubtedly, self-efficacy is a key construct and an important mediator related to academic achievement and specifically to language proficiency.

Anxiety also features as a theme related to learning in general (Bandura, 1989; Brown, 2008; Clement, Baker & MacIntyre, 2003; Cubukcu, 2008; Ehrman & Oxford, 1995; Gregersen & MacIntyre, 2014; Horwitz, 2000; MacIntyre et al., 1997; Mills et al., 2006; Pajares, 1995). Specifically in the SLA literature, it is defined as “one of the affective factors that have been found to affect L2 acquisition” (Ellis, 2004, p.693), and may have a facilitating or debilitating effect (Banya & Cheng, 1997; Mills et al., 2006), though it is less prominent a determinant than self-efficacy.
In summary, motivation, self-efficacy and anxiety, are key individual differences considered to impact students’ perceptions of their linguistic abilities in the SLA literature.

2.5.3 Student perceptions in the higher education literature

Literature reporting students’ perceptions of ELP within higher education mirrors several of the themes from the SLA literature. A study of the grades and beliefs of 798 international university students by Rochecouste et al. (2010), for example, found that motivation, confidence and positive thinking were key affective factors in student advancement. Oliver, Dooey, et al. (2012) also cite the key importance of motivation for growth of ELP to occur and the challenges that students perceive with sustaining this throughout their degree. Lei and Hu (2014) investigated the outcomes and perceptions of 136 Chinese undergraduates. This study was one of the few that utilised a validated ELP test to compare measurable ELP against perceptions. They found a cause/effect relationship between motivation/attitude to ELP and measurable ELP, evidencing that students’ perceptions are a crucial influence on further language learning and use, mediating the effectiveness of EMI.

Case studies from the UK context (Schweisfurth & Gu, 2009) evidence the key role of self-efficacy in the growth of intercultural and academic confidence over the first two years of university study. Indeed, self-efficacy and motivation feature heavily in research findings. Mills et al. (2006) found that self-efficacy impacted students’ judgments of their academic performance. Phakiti et al. (2013) investigated factors beyond ELP that impacted the academic success of EAL students in one Australian university and found positive correlations between self-efficacy, personal values, motivation and self-regulation, analogous with the findings of the studies from other contexts cited earlier in the previous section. Self-efficacy was found to have a direct connection to English grade, which then largely predicted GPA. Perception in difficulty exhibited a negative correlation coefficient to other factors, suggesting that students who reported a high
degree of difficulty were likely to exhibit a low level of self-efficacy as well as having a low level of motivation to learn or improve their performance. The higher education literature consistently notes a connection between higher levels of English language proficiency and student agency (Arkoudis & Tran, 2007; O’Loughlin & Arkoudis, 2009; Sawir et al., 2012; Xu, 2012). O’Loughlin and Arkoudis, for example, cite agency as a key factor affecting students’ willingness to actively seek out opportunities to improve ELP during university studies.

Differences in levels of student confidence are also borne out in the literature. Haugh (2015, in press) reports on EAL students’ lack of confidence and perceived inadequacy in communicating in English in various spheres of interaction, which may affect them personally, relationally and communally. Ramachandran (2011) found that students may swing from inaccurate confidence that they can speak English to the equally inaccurate conclusion that they cannot. Some scholars suggest that Asian students may falsely ascribe difficulties at university to ELP deficiency and that both students and staff often over-simplify and over-attribute difficulty to ELP (Haugh, 2015). However, even perceptions of inadequacy have been found to impact academic achievement (Barker, Child, Gallois, Jones & Callan, 1991). Hulstijn and Bossers (1992) believe that academic outcomes are often considered due to ELP when there may be general deficiencies in L1 not just L2. Students’ perceptions appear to be strongly influenced by individual differences and may not accurately reflect their true ELP. Nevertheless, the literature shows a symbiotic relationship between perceived ability and confidence.

Linked to that is the notion of anxiety. Brown’s ethnographic study (2008) of postgraduate EALs in the UK found that students have high levels of anxiety in relation to their level of ELP, particularly early in their sojourn, making
them feel disadvantaged and inferior to their domestic counterparts. Panic, ineptitude and shame associated with poor ELP was reported as prevalent for everyday interactions with local people as well as campus-based activities. Woodrow (2006) found that the most frequent source of anxiety was interacting with native speakers while Haugh (2015) found that various interactions with domestic students, academic or administrative staff could leave EAL students feeling the target of perceived discrimination or even contempt. He reports on EAL students’ ‘troubles talk’ (2015; in press) when discussing such matters. Oral competence has been reported as particularly problematic and several studies report that, as a result of perceived weak ELP, EAL students used avoidance strategies and/or retreat into monoethnic groups (Hennebry, Lo, & Macaro, 2012; McMahon, 2011; Wang, 2012), which in turn continued to limit the improvement that could be made. These studies also found that confidence grew as students’ perceived linguistic and intercultural competence developed.

Academic difficulty/adjustment challenges as a result of a perceived lack of English language proficiency are also common themes in the literature (Andrade, 2006; Campbell & Li, 2008; Osmond & Roed, 2010; Ransom, Larcombe & Baik, 2005; Robertson, Line, Jones & Thomas, 2000; Wan, Chapman & Biggs, 1992; Wang & Shan, 2007; Yeh & Inose, 2003). Andrade (2006) summarised 58 studies in various higher educational contexts related to the adjustment of international students, concluding that ELP and cultural differences were perceived by students to be the greatest issues. In Ransom’s (2009) study in the Australian context, 60% of the EAL students surveyed reported that they perceived their limited language proficiency to be a disadvantage. Tananuraksakul and Hall (2001) found in their study of high level Australian postgraduates that students reported experiencing a communication barrier due to perceived language inadequacy. Other literature suggests that the issues may be academic and cultural adjustment issues per se (Andrade, 2010; Burns, 1991; Carroll & Ryan, 2005; Gilbert, 2000; Li, Chen & Duanmu, 2001; Phakiti, 2008; Phakiti & Li, 2011; Ramsay,

There is also commentary on EAL university students’ views regarding the impact of ELP on their academic success. Ransom et al. (2005) report that 79% of the EAL tertiary students surveyed believed their ELP to be high enough to pass their university course but only 32% said it was high enough to perform well. 71% rated their ELP as low/intermediate and only 4% rated it as very high or native proficiency. In Burns’ study (1991), more than 50% of the EAL students perceived their skills to be poor or very poor. Schweisfurth and Gu (2009) note that, prior to commencing only 7% of EAL students had been concerned that their ELP might be a challenge but this figure rose to 44% after arrival. Students may not be accurate judges, however: Rogier (2012) found that students’ views of their improvement over a four-year degree were lower than their actual performance. Students cited a lack of confidence in English, a lack of familiarity with education norms, and inferiority complexes in relation to native speaker domestic students. Others report that their perceived ELP impacted their interactions in and out of the class (Lee & Woodrow, 2008; Zhang & Brunton, 2007). Not all students shared such negative view of their ELP, however. Stappenbelt (2008) showed that students perceived that they had sufficient English at entry and subsequently had made little effort to improve their English during their degree. Ransom et al. (2005) found that, despite not perceiving their ELP to be high, students did not spend much time out of class developing language yet still had high expectations for their academic results, showing that, even where ELP is perceived as inadequate, students may make little attempt to improve it.

Numerous comments appear in the higher education literature in relation to perceived language acquisition during university degrees. In Campbell and Li’s 2008 study in the New Zealand context, several participants reported only understanding around half of the input after one year of study with
still struggling after three years. Zhang and Mi (2010) investigated the of forty Chinese EAL students at eight Australian universities who believed that two years was the clear cut-off for when language becomes less problematic in the university context. They believed their skills had over time. Craven (2012) similarly found that students believed their ELP improved during their degrees even where their IELTS exit test scores did not evidence a measurable improvement. Such inconsistencies in perceived versus actual appear to be attributable to individual differences. Bernat (2006) comments that

“beliefs about language learning are due to the effects of individuals’ complex metacognitive structure (as affected by a number of social, cultural, contextual, cognitive, affective, and personal factors) that is responsible for the nature and strength of these beliefs” (p.202).

There is limited research indicating students’ conceptualisations of the construct of ELP. Lee’s (2015) study is unique in investigating this. In this study, students used sub-competencies or constituent components to define it, such as a particular language skill (e.g. reading, writing), domain (e.g. lexis, grammar), or task (e.g. general understanding, writing an email). Student conceptualisations of the construct are therefore under-researched. In some studies, students have described their perceived weakness in terms of macro skills. Pantelides (1999) and Campbell and Li (2008) report that students their writing was inadequate to meet the needs of tertiary study. Similarly in Burns’ study (1991), students ranked writing as the weakest skill and reading the strongest. Knoch et al. (2015), using the DELA, found that students commenced their degrees with high expectations for improving their though there was no measurable evidence of them doing so. Most in the study perceived the importance of engaging in reading, listening writing in English and attributed any improvement (or lack of) to be related it. Several studies have found that students believe their speaking and listening abilities hamper their active participation in class and their
confidence in approaching Australian students (Barker et al., 1991; Briguglio & Smith, 2012). Rochecouste et al. (2010), for example, found that listening to a range of accents in the higher education context was a particular concern.

2.6 Literature summary

This chapter has provided an overview of the literature related to the construct of ELP in the SLA literature and in higher education. In terms of theorisation, there is no currently agreed-upon model of AELP, although it is understood from the perspective of the communicative competence frameworks in SLA as well as the conceptual models from the higher education context. The literature indicates concern over the ELP outcomes of EAL students and the impact of them both at university and beyond graduation, yet no ideal way has been identified to measure it. Pragmatic attempts to do so with available knowledge and instruments include exit testing.

Although the literature reports on students’ perceptions of ELP in the SLA and the higher education context, few studies have utilised validated proficiency tests to compare perceived proficiency to actual measurable proficiency. Motivation, self-efficacy and anxiety emerged as key themes and, in the higher education context, students appear to be aware of the impact of ELP on academic success. Only one study appears to investigate students’ perceptions of the construct of academic English proficiency, while proficiency at the point of graduation is under-researched. We know relatively little about undergraduate students’ conceptualisations of the construct, or how their views compare to the literature or to measurable graduating ELP. This study therefore contributes a unique focus by utilising measurable proficiency outcomes at graduation as a benchmark for reflecting on students’ conceptualisations of the construct in the higher education context.
2.7 Research questions

This study addresses three sets of research questions related to undergraduate EAL student conceptualisations of ELP and outcomes. It also integrates them to consider the degree of convergence or divergence.

Student conceptualisations

RQ 1:
1.1 How do undergraduate international EAL students conceptualise ELP within higher education?
1.2. Is there any systematic variability in conceptualisations correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or stage of degree?

Student outcomes

RQ 2:
2.1 What are the graduating outcomes of undergraduate international EAL students (as measured by IELTS (Academic) and GPA)?
2.2 Is there any systematic variability in outcomes correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or reason for taking the IELTS test?

Integrating the findings: convergence/divergence

RQ 3:
3.1 To what extent, and in what ways, do undergraduate EAL student conceptualisations converge with the measurable outcomes of ELP?
3.2 To what extent, and in what ways, do conceptualisations and measurable outcomes converge with the policy discourse or existing frameworks of ELP?
The following chapter discusses the methodology employed in each part of the study to operationalise these research questions.
Chapter 3: Methodology

The previous two chapters presented the context and literature related to the ELP of EAL students in higher education. This chapter explicates the methodology for the study, starting with the research framework and paradigmatic position of the researcher, followed by the research design for the study, the methods used in each of the three parts of the primary research, ethical considerations, and the limitations of the study.

3.1 Research framework and paradigmatic stance

It is the obligation of researchers to be aware of and declare the ontological and epistemological stance which underpins their research. Multiple research paradigms or ‘worldviews’ exist and I subscribe to what has been labelled Pragmatism. This paradigm is considered by proponents as an alternative to pure (Post-)Positivism or Constructivism, accepting that “no one research paradigm can answer all the questions which arise in educational research” (De Landsheere, 1997 p.14). Ontologically, pragmatists are wary of absolutes and cognisant of the fact that every decision taken by the researcher shapes the outcome (Creswell, 2008; Firestone, 1987). They endorse the belief that there is an external reality independent of our minds but which cannot necessarily be determined once and for all (Tashakkori & Teddlie, 1998). Many social scientists hold this view, though it is also prevalent in numerous other disciplines. The philosopher Latour (2004), for example, coined the term ‘matter of concern’ as an alternative to ‘matter of fact’, while Drucker, in the field of the graphical visualisation, neologised the term ‘capta’ (2010, 2011) as an alternative to ‘data’ to describe the actively ‘taken’ information from which knowledge is constructed. Statisticians who subscribe to Bayesian interpretations of probability (Gelman & Hennig, 2015) also accept that “knowledge is at best an approximate description of reality” (Blyth, 1972, p.20), and, rather than a number to derive certainty, a statistic provides a flavour to situate it.
Pragmatists agree that methods should be chosen for their appropriacy “rather than with regard to some preconceived biases about which research paradigm should have hegemony” (Johnson & Onwuegbuzie, 2004, p.23). As a result, Mixed Methods became a legitimate form of inquiry in the late nineties, established by Teddlie and Tashakkori, and since then many studies in Applied Linguistics have combined methodologies (Dornyei, 2007). The method of enquiry may be deductive or inductive at different stages in Mixed Methods, rejecting the ‘either-or’ of the purist (Post-) Positivists or Constructivists (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 1998).

Creswell, Plano Clark, Gutmann and Hanson (2003) state that nomenclature referring to Mixed Methods varies considerably including ‘multimethod designs’, ‘multimethodological research’ and ‘mixed model studies’. For the sake of parsimony, I will adopt the term Mixed Methods, despite the fact that this is an epistemological position across the research design rather than simply mixing ‘methods’ in the narrow sense of data gathering and analysis techniques. Mixed Methods has a number of identifiable characteristics related to when and how the data are mixed, the status of the various components (i.e. weighting) and the timing of the varying methods e.g. simultaneous or sequential (Greene, Caracelli, & Graham, 1989). It is therefore not a matter of employing qualitative or quantitative methods per se but rather an attitude toward an interpretive treatment of the data. This approach has numerous advantages: it can both corroborate findings and expand one’s understanding (Johnson & Onwuegbuzie, 2004, p.19) to provide a complex picture of this social phenomenon and “offset the weaknesses and flaws inherent in particular research methods through triangulating evidence from potentially complementary research designs and methods” (Alton-Lee, 2006, p.78).

I have personally always had an appreciation for quantitative data and the statistical analysis made possible by the collection of test scores or survey
data. However, I believe that some issues are best researched using qualitative techniques, especially to explore the why and how of quantitative findings or to investigate ‘emic’ viewpoints, while other issues might benefit from a mixed methods approach to provide a more nuanced understanding of the phenomenon in question by combining quantitative and qualitative methods. This latter approach was deemed appropriate for this study which foregrounds student conceptualisations but also makes use of student outcomes.

3.2 Research design

A Mixed Methods design is apposite for this study, driven by the research questions and the ensuing research design, to examine the object of study of the construct of ELP in higher education from multiple perspectives. It is acknowledged that quantitative data is rhetorical in character and an artifice of the competence measured, but balanced with the ‘emic’ student conceptualisations, the findings would arguably provide a richer contextualised response through the triangulated data (Morse, 1991). Student conceptualisations are gathered and analysed via (qualitative) focus group data in Part 1 leading to a (quantitative) survey in Part 2. Part 1 and 2 taken together address research questions (RQ) 1.1 and 1.2 related to student conceptualisations of ELP in higher education. For Part 3, student outcomes are represented by a combination of academic and linguistic outcomes at the point of graduation. As constructs are by their nature unobservable, Grade Point Average (GPA) was taken as a proxy to represent academic outcomes, while IELTS Academic, a standardised language proficiency test, was used to operationalise and measure graduating linguistic outcomes. Part 3 addresses RQ 2.1 and 2.2 related to student outcomes. The findings of Part 1, 2 and 3 are then integrated to investigate convergence or divergence, including a return to the policy discourse from Chapter 1 and the theorisation in the literature from Chapter 2 to address RQ 3.1 and 3.2. This research design is shown visually in figure 3.1 below.
Creswell (2008) refers to four key mixed method designs: sequential/two-phase, parallel/simultaneous, equivalent status design and dominant/less dominant studies. This study as a whole conforms to an equivalent status design in that the conceptualisation data from Part 1 and 2 are used to triangulate with the outcomes data from Part 3 and assumed *a priori* to be of equal importance. Creswell (2008) describes this as ‘interpretation’ through triangulated Mixed Methods design, and Greene, Caracelli & Graham (1989) term it ‘complementarity’; that is, to investigate overlapping but different facets of the same phenomenon. For this design, data is collected and analysed separately before the findings are compared. If we break the design down further, we see that Part 1 and 2 might be described as a sequential/two-phase design (Creswell, 2008; Teddlie & Tashakkori, 2009) which is exploratory in nature, using qualitative data first from the focus groups in Part 1 to inform the design of the subsequent quantitative survey in Part 2 to refine, confirm or extend the qualitative findings. In this way, the survey is grounded in thick qualitative data. In the topology provided by Greene et al. (1989), this design is described as being used for the purpose of development; that is, to use the results of the first to develop or inform the second.
We now consider each part in more detail, focusing on the method, sampling, instruments, data collection, description of the cohort, and data analysis procedures.

3.3 Part 1: Focus groups

Part 1 investigates student conceptualisations of ELP in higher education via multiple focus groups from identified participant subgroups. Accepting that reality is socially constructed and that insider meaning broadens the possible repertoire of interpretations, this study seeks “understanding of this construction and the multiple perspectives it implies” (Richards, 2003, p.38) and purposely privileges the student view.

3.3.1 Focus groups as method

“Interviewing is the central resource through which contemporary society engages with issues that concern it” (Rapley, 2004, p.17) and as much as 90% of current social science investigation relies upon this method of data collection (Gubrium & Holstein, 2002) making it “the most common procedural facilitator for the expression of experience of our times” (p.30) with an almost taken-for-granted position in social research (Potter & Hepburn, 2005). In international education, interviews are the second most popular method after case studies (IEAA, 2015), perhaps because ideas and beliefs are best understood through interview (Richards, 2003).

Focus groups, as a variation of the interview, have been popular in social science research since the 1980s to “get closer to the thoughts and experiences of smaller and more specific segments of society” (Morgan, 2002, p.142). As with all methods, they have their virtues and limitations. Creswell (2008) suggested that focus groups have the advantage of drawing on the interaction among interviewees, which “will likely yield the best information” (p.226). Best practice in focus groups is to utilise small groups in a focussed discussion of around one hour, though exact length and size depends on the
context (Teddlie & Yu, 2007). Focus groups are less time-consuming than multiple one-on-one interviews both to conduct and to transcribe, though transcription and analysis of focus groups can be more complex due to multiple voices and potentially overlapping comments. Topics or questions are specified in advance by the researcher along a continuum of scripted, semi-structured to unstructured to provide varying amounts of latitude to both interviewee and interviewer (Freebody, 2003; Teddlie & Tashakkori, 2009). Pre-set topics and questions, regardless of the degree of structure, reflect the researcher’s epistemological orientation and views. Focus groups can aim to generate contrasting cases though, in general, they provide more typical case views than a one-on-one interview due to the norming of views in a group setting (Teddlie & Yu, 2007). While there is the advantage of participants feeding off each other as well as the prompts of the interviewer, the interviewer must ensure all participants participate equally due to “a veritable swirl of subject formations and opinion construction” (Gubrium & Holstein, 2002, p.27). Freebody (2003) describes interviews as data generating rather than data gathering, dynamic rather than static interactional events based on cultural norms, and therefore deceptively complex to collect and analyse. Constant comparative analysis relying on an iterative approach is common at the data analysis stage (Creswell, 2008; Strauss & Corbin, 1998). This part of the study follows the general principles for conducting focus group interviews recommended in the methodological literature (Bryman, 2006; Creswell, 2008; Dornyei, 2007; Rapley, 2004; Richards, 2003; Richards, 2009; Tashakkori & Teddlie, 1998, 2003; Teddlie & Tashakkori, 2009).

In addition to these general principles, interviews and focus groups require a focus on discursive considerations. Participant responses cannot be viewed as reports of a single truth but rather as accounts of a phenomenon or event (Richards, 2003). As Freebody said: “It is no longer theoretically or empirically warrantable to treat interviews as transparent windows onto people’s stable, self-contained knowledge or beliefs about a topic” (2003, p.134). Output can therefore not be taken as pure ‘fact’ (Silverman, 2001) and
issues such as positioning, footing, co-construction and non-neutrality need to be borne in mind. When dealing with students from cultures where there is a wide power differential between someone in authority (such as a teacher or interviewer) and the student, the power dynamic and reflexivity could be problematic if participants feel the need to express what the interviewer wants to hear. Social Desirability Response Bias may also play a role (Ehrman & Oxford, 1995). To minimise the effect of the power dynamic on the outcomes, while accepting it exists (Norton & Early, 2011), there are several prerequisites. Firstly, the interviewer needs to be aware of his/her manner and how to ‘settle in’ as well as to encourage students to talk as well as listen. Additionally, the students might be intentionally positioned (van Langenhove and Harré’s ‘second order’ positioning) as ‘expert’ by virtue of the fact that questions are centred around Perceptions, Opinions, Beliefs and Attitudes (POBA) (Puchta & Potter, 2004) as it is self-evident that people are the best experts of their own POBAs. Positioning the respondent also raises the issue of whether they are speaking as a recruited and representative category member (and therefore as a conduit to broader institutional identity), or as persons with their own unique and idiosyncratic preferences (Potter & Hepburn, 2005; Rapley, 2004). It has also been suggested that consideration should be given to ‘footing’, a related issue to positioning (Potter & Hepburn, 2005). ‘Footing’ refers to the fact that “the interviewer presents as not merely a conduit to the collection of knowledge but an active participant with their own knowledge and views” (Potter & Hepburn, 2005, p.295). This leads to consideration of the speaker’s alignment to the talk: whether they are reporting the words of others, speaking for themselves or on behalf of others.

Much of the recent literature suggests that interview data is co-constructed between interviewer and interviewee (Johnson, 2006; Miller & Glassner, 2004; Rapley, 2004). Influenced by Foucault’s work on the understanding and importance of the self and the individual, recent thinking has moved beyond the view of participants as passive subject. Experts in the field suggest that “the reality produced is negotiable” (Johnson, 2006, p.215) and that we
should accept the subjectivity of the interview (Miller & Glassner, 2004). Gubrium and Holstein counter the previous view of the asymmetrical relationship in interviews and contend that we are “collaboratively making audible and visible the phenomenal depths of the individual subject at the centre of our shared concerns” (Gubrium & Holstein, 2002, p.11). The postmodern trend, therefore, purposely blurs the distinction between interviewer and respondent and sees an overlap of roles, meaning that content is attributed to both interviewer and interviewee.

Given this view of co-construction, neutrality is not possible as there is “always a working model of the subject lurking behind the persons assigned the roles of interviewer and respondent” (Gubrium & Holstein, 2002, p.12). Neutrality has been replaced with active or non-neutral interviewing in contemporary methodology (Potter & Hepburn, 2005) while Rapley contends that neutrality is “a mythological (and methodological) interviewer stance” (2004, p.21). Indeed, the interview is always connected to the interviewer’s theoretical interests, for example, and it is the interviewer who chooses the topic, the trajectory and what is ultimately reported. In this way, self-disclosure of interviewer and self-censorship is no longer required. The literature related to Discursive Psychology (Edwards, 2005; Potter & Edwards, 2001) takes a constructionist perspective to interview data and suggests that “people construct views of the world that attend to their factual status…and to the current interaction in which versions are offered” (Potter & Edwards, 2001, p.111). This suggests that the participants may formulate or amend their inherently subjective understanding during the focus group. In this study, participant ‘bias’ is viewed as desirable (Richards, 2009).

Co-construction also impacts transcription and it is suggested that the interview extracts should be transcribed to a level that allows interactional features to be appreciated (e.g. acknowledgement tokens from the interviewer) even if interactional features are not the topic of the study. While a traditional Jeffersonian approach to transcription may be

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unnecessary in this research (Jefferson, 1985), Potter and Hepburn argue that this representation makes the jointly constructed, socially engaged nature of what is going on most apparent, including the close dependence of what the interviewee says on the interviewer’s question (and vice versa) in all its specifics. In sum, researchers need to analyse interview data with care, taking into account the multiple positionings and footings that may be at play.

3.3.2 Sample selection

The study is restricted to undergraduate EAL students. Undergraduate students were identified because, at the time of writing, language entry requirements at the research site differed for undergraduates (minimum overall IELTS 6.0 with no subscore below 5.5) and postgraduate and High Degree by Research students (minimum overall IELTS 6.5 with no subscore below 6.0). Additionally, an undergraduate program typically takes three years whereas a postgraduate program can be as short as one year. Postgraduate students are likely to be older, possibly more mature and are said to be socioculturally different to undergraduates (Guilfoyle, 2006; Novera, 2004; Phakiti & Li, 2011). For all of these reasons, it was felt that restricting the sample to a more homogenous group would reduce the impact of additional variables such as language entry requirements, age or length of study. This study also excludes domestic EAL students as they bring added complexity such as the length of time they may have lived/studied in Australia or other English Medium of Instruction (EMI) contexts, and the impact of this on their views as well as language proficiency.

For Part 1, the sampling was purposive. Firstly, groups were based on stage of degree to provide between-group heterogeneity for maximum variation within the EAL undergraduate target group and so as to elicit a range of views (Dornyei, 2007; Richards, 2003). This causal comparative design (Tashakkori & Teddlie, 2003) allows for comparability between groups at the analysis stage, which is often at the core of qualitative research. Three groupings were identified: students early, mid and late in their undergraduate degree studies.
Three focus groups were conducted with students in their first semester at the University, one group comprised students mid-degree, and two with students in their final semester as shown in figure 3.2. In this way, around half the participants were early in their studies and half were at least halfway through their degree program.

![Focus group sampling](image)

*Figure 3.2. Focus group sampling*

Additionally, volunteers were targeted to maximise within-group heterogeneity as far as possible in terms of L1s, entry pathways, and degree programs. This was achieved by a) recruiting students currently enrolled in compulsory first semester English Language Enhancement Courses, b) recruiting students who had previously been enrolled in the latter courses and were midway through their programs, and by c) inviting final semester undergraduate students via lecture visits (with permission) in the core subjects of four final year undergraduate programs. Each focus group comprised 4-6 members as “within-group interaction can yield high-quality data as it can create a synergistic environment that results in a deep and insightful discussion” (Dornyei, 2007, p.144). In all, six focus groups were conducted across two semesters. This was deemed to provide adequate data to allow saturation and thick description whilst adhering to pragmatic considerations (Dornyei, 2007).

### 3.3.3 Interview protocol

The interview protocol (see Appendix C) was devised after reading the literature on student perceptions of ELP (see Chapter 2), and the methodological literature for best practice in focus group interviewing.
Questions were devised using student-friendly concrete terms rather than metacognitive or linguistic abstractions, and each of the four main questions in the content phase included a bridging comment to signal topic shift. It was not intended that all questions would be asked but a discussion trajectory was considered at the planning and preparation phases. Prompts were generated to ensure coverage of the topic, though it was expected that responses would arise naturally without prompting. As it is the RQ itself that should be explored, it was accepted that the respondents may take the interview in a direction not entirely anticipated.

The protocol uses a progressive focus from general to specific (Dornyei, 2007; Richards, 2003). The opening phase aims to create rapport and allow for settling in. The main content questions focus on experiences, opinions, feelings and knowledge directly related to the RQ. The closing questions wrap up and allow respondents to add anything that may not have been covered during the interview that they wish to share. This is important as they may have felt constrained to answer only the questions posed during the interview itself. The protocol was piloted with one group and amended after the initial trial.

3.3.4 Data collection

Students were identified and recruited via relevant lectures according to the sampling described above. A follow-up email clarified the project to the volunteers and provided the documentation required for ethical clearance. They were offered a $20 supermarket gift voucher as an incentive to participate. The first round of focus groups was conducted early in Semester 1 2014. The second round took place late in the same semester and the third set was conducted in Week 3 of Semester 2 2014. In this way, students were drawn from two semesters in a relatively short timeframe – what Dornyei termed “synchronic investigation” (2007, p.88) – which can avoid the disadvantages of attrition, conditioning, maturation or the normative effects of repeat interviews by capturing a single point in time. For comparability
purposes, the focus groups each followed the same general format using the devised interview protocol. The group interviews were recorded using an MP3 recording device and each took around 45 minutes.

There are various transcription methods in use by researchers. For this study, a simple transcript notation was adapted from Poland (2002) (Appendix D). In this study, the messiness of the spoken ‘sentence’ was maintained and quotations were only tidied up to remove false starts, repetition, or hesitation for the sake of readability. Participant names were changed to numbers for de-identification purposes. Transcription aims to be “a faithful reproduction of the oral record” (Poland 2002, p.635) though transcribing spoken language is “inherently representational and interpretive” (p.629) in nature. Once transcribed, the transcript was checked against the audio for verification and to allow the researcher to become familiar with the data before coding. The transcripts were imported into computer-assisted qualitative data analysis software (CAQDAS), in this case NVivo 10. The interview transcripts can be found in Appendix E.

### 3.3.5 Description of the cohort

Each group comprised participants with varying L1s, entry pathways, and degree programs. Across the six groups, participants came from eighteen first language backgrounds including: Arabic, Bahasa Indonesia, Chinese (Mandarin), French, German, Gujarati, Hazaragi (Persian), Korean, Kirundi, Russian, Shona, Sindhi, Sinhalese, Spanish, Tagalog, Thai and Vietnamese. The following nine undergraduate degree programs were represented, the most typical undertaken by international students at the University: Accounting/Law, Business, Criminology, Engineering, Event Management, Finance/Economics, International Business, IT, and Nursing. Students had entered the University by all of the main entry pathways: High school in an EMI context, language proficiency test (both IELTS and TOEFL), a pre-sessional academic English Direct Entry Program (DEP), or Diploma
(TAFEs, the University’s pathway partner, and similar). The participants’ details are shown in the table below.

Table 3.1

**Focus Group Participants**

<table>
<thead>
<tr>
<th>Transcript ID</th>
<th>First language</th>
<th>Entry pathway</th>
<th>Degree program</th>
<th>Stage of degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gujarati</td>
<td>Pathway partner</td>
<td>Business</td>
<td>early</td>
</tr>
<tr>
<td>2</td>
<td>Chinese</td>
<td>IELTS</td>
<td>Accounting</td>
<td>early</td>
</tr>
<tr>
<td>3</td>
<td>Sindhi</td>
<td>Pathway partner</td>
<td>International Business</td>
<td>early</td>
</tr>
<tr>
<td>4</td>
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<td>TAFE</td>
<td>Business</td>
<td>early</td>
</tr>
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<td>early</td>
</tr>
<tr>
<td>6</td>
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<td>Business</td>
<td>early</td>
</tr>
<tr>
<td>7</td>
<td>Mandarin</td>
<td>TOEFL</td>
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</tr>
<tr>
<td>8</td>
<td>Thai</td>
<td>Pathway partner</td>
<td>Accounting/Law</td>
<td>end</td>
</tr>
<tr>
<td>9</td>
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<td>Pathway partner</td>
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</tr>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
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<td>Shona</td>
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<td>Business</td>
<td>mid</td>
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<td>33</td>
<td>Korean</td>
<td>Pathway partner</td>
<td>IT</td>
<td>mid</td>
</tr>
</tbody>
</table>
3.5.6 Data analysis

Content analysis was undertaken as it was respondents’ perceptions that were of interest rather than the language they chose to express them, bearing in mind the discursive considerations outlined above (Krippendorff, 2013). The interviewer’s comments were not coded so as not to interfere with frequency counts, though they were not bracketed off so that the full context of responses would remain.

The approach used for this data analysis was influenced by the core qualitative tradition of Grounded Theory (Creswell, 2008; Glaser & Strauss, 1967; Richards, 2003; Strauss & Corbin, 1998). In its pure form, Grounded Theory codes the data in three strict stages: open, axial and selective coding. Originally, grounded theory eschewed hypothesising in advance, drawing conclusions only from the emerging data. However, Strauss and Corbin later advocated the use of preconceived ideas as well as allowing ‘theory’ to emerge (Dornyei, 2007; Strauss & Corbin, 1998). A more recent iteration of this approach is Constructivist Grounded Theory, which is a pragmatic approach in that it accepts that findings will be constructed and coloured by the researchers’ and participants’ own preconceptions rather than ‘discovered’. Constructivist Grounded Theorists also believe that it is not necessary to delay the literature review (Thornberg, 2012) as per the purist approach, thus enabling researchers to draw on what is already known in the topic. Other experts also pragmatically acknowledge that coding has, in fact, already begun with the stating of the RQs & aims (Richards, 2003) and even advocate a method of preparing a pre-determined template of codes (Crabtree & Miller, 1999). Miles and Huberman (1994) underscore the usefulness of exploring how themes are arrived at both deductively (bringing codes to the data) and inductively (finding them in the data) and that this approach can
make analysis more acceptable to those sceptical of qualitative research. Maxwell similarly distinguishes types of categorisation (2005, pp. 96–8):

1. Organisational: the broad issues or topics established or anticipated prior to the collection of data.
2. Substantive: categories that help to explain “what's going on” and are derived from the participants' own output; they are often subcategories of organisational ones, but are generally not formulated a priori.
3. Theoretical: categories that are formulated by the researcher prior to data analysis, typically derived from an accepted or self-produced theoretical framework.

The first two types are relevant here. Organisational categories equate to the topics in the protocol. Substantive categories, being more interpretive, referred to the threads of reasoning that emerged in participants' own views which was not premeditated by the researcher. Bearing this in mind, the data was analysed from two perspectives. Firstly, the pre-defined themes from the interview protocol were drawn on, accepting that these themes were pre-defined and the responses would be highly related to them. This iterative elimination provided the following seven over-arching themes and related subthemes:

*Protocol-driven themes*

- Defining AELP
  - Types of ELP
- ELP at various stages of studies:
  - at entry
  - improving ELP during degrees
  - the standard required to pass a course
  - the standard of ELP required at different stages
  - at graduation
- The use of L1 during studies
- Roles and responsibility for developing ELP
- The perceived importance of ELP
- The reason for selecting Australia
- Defining the successful international graduate

The second set of themes was data-driven, that is, the themes arose directly from the respondents’ responses and were not introduced by the interviewer. Here an inductive approach was taken, coding the data through several iterations including the grouping of concepts and identification of categories until these were exhausted (Richards, 2003) or what Dornyei described as “latent level analysis” (2007, p.246) to interpret and build theory using an iterative approach. This constant comparative analysis is the most common method of analysing qualitative data (Glaser & Strauss, 1967; Guba & Lincoln, 1994). These themes were ultimately aggregated into four broad themes:

*Data-driven themes*

- Linguistic matters
  - the four macro skills (speaking; writing; listening; reading)
  - vocabulary
  - grammar
  - genre; rhetorical patterns; logic
- Staff support/feedback on AELP
- Motivation
- Troubles talk and interpersonal experiences

It was also acknowledged, as Maxwell (2005) and Strauss (1987) point out, that qualitative coding is more concerned with ‘fracturing’ data into meaningful categories than with counting instantiations of those categories. Where counting was undertaken, the same issue mentioned by different people was counted as well as the same issue mentioned repeatedly by the
same person. In this way, the frequency counts represent a combined index of a measure of relative intensity as well as a measure of relative distribution.

The reliability of the analysis was increased by the partial recoding of clean data by the researcher after a considerable time lapse. Finally, comments were analysed in relation to the key variables in the cohort; that is, first language, discipline, entry pathway, and stage of degree. Each of the above themes was analysed in turn.

3.4 Part 2: Survey

Part 2 investigates how widely the conceptualisations solicited in Part 1 existed in a larger sample. Combining a qualitative interview with a follow-up survey allows us to target the issues uncovered, to consider any generalizability or extension of the interpretation of the findings, and to test certain elements of theory which emerged from the qualitative phase (Dornyei, 2007). The quantitative data also mitigates the non-representativeness of the small focus group sample, which may be vital for a future audience. The purpose of this phase was therefore to address the same central research questions by exploring the suggestive trends identified in the focus groups via qualitatively-informed quantitative data.

3.4.1 Survey questionnaires as method

A cross-sectional survey questionnaire was identified as the method for this stage of the study. Survey questionnaires are one of the most common methods of conducting research (IEAA, 2015; Tashakkori & Teddlie, 2003) and, besides language tests, the most common data collection method in Applied Linguistics (Dornyei, 2007). They have been widely used in relation to eliciting perceptions and attitudes of language learning (Bernat & Gvozdenko, 2005; Horwitz, 1988, 1999; Tanaka & Ellis, 2003; Yeh & Inose, 2003). Questionnaires involve the investigation of responses from a sample taken from an identified target population, and the results can then often be
generalised to the population if appropriate sampling has been utilised (Creswell, 2008; Czaja & Blair, 2005). This method is appropriate for comparison between groups and for observing correlations, working particularly well for the large-scale collection of data related to perceptions and attitudes of a research topic. When well-constructed and adhering to best practice principles, they have many advantages including efficiency, versatility, and reliability (Dornyei, 2007). As in this study, many pragmatic mixed methods researchers use surveys in conjunction with interviews/focus groups for complementarity in mixed methods designs to provide a richer and more robust response to the construct under investigation (Creswell. 2008; Tashakkori & Teddlie, 2003).

The five stages of survey design were followed: planning and designing, piloting, revising, data collection, coding and analysis/interpretation. Each stage involves consideration of sampling, the survey instrument, and operations (Castro, Kellison, Boyd & Kopak, 2010; Czaja & Blair, 2005, Dornyei, 2007). To reduce coverage error, probability sampling is considered optimal to generalise to the population, though this is not always feasible. To reduce sampling error, it is best to use as large a sample as can be obtained and that is practical to analyse so that the sample exhibits characteristics of the wider population (Creswell, 2008; Freedman, Pisani & Purves, 2007). To reduce measurement error, clear unambiguous questions are required and experts recommend as many closed questions as possible, though open-ended questions are useful at the piloting stage (Dornyei, 2007). The literature suggests that similar questions should be posed in each section with 4-10 items aimed at the same construct (Dornyei, 2007) and a ‘buffer’ or neutral question is recommended before more sensitive questions (Creswell, 2008). Czaja and Blair and Dornyei suggest ordering the questions from introductory, to substantive to biographical, though typically biographical come earlier. Researchers should bear in mind the tendency for people to agree “acquiescence response” (Czaja & Blair, 2005, p.82) and therefore the inclusion of ‘I don’t know’ as an option is recommended. The length should
also consider the perception of burden, not exceeding six pages and thirty minutes to complete (Czaja & Blair, Dornyei, 2007). For reliability, the internal consistency of the instrument should be checked using the alpha reliability statistic and reported for all subscales (Woodrow, 2014). All of these recommendations were implemented for this study.

3.4.2 Sample selection

The study analysed data from a representative sample of international undergraduate EAL students from the same research site as the previous phase. Numerous guidelines were used to inform the sample size required as recommended in the methodological literature. Expecting a response rate of approximately 10-15% and to generate a sample large enough to generalise to the population \( (N = 8000) \), the desired achieved sample size was considered \( a \) priori to be between 200 and 300. This is an appreciable sample size in itself, and according to Freedman, Pisani and Purves (2007), “it is the absolute size of the sample which determines accuracy not the size relative to the population” (p.367). This number of responses would also be acceptable given the ‘rule of thumb’ guideline for calculating a desirable achieved sample, which is determined by multiplying the number of items on the questionnaire by the number of options; in this case, 39 Likert items on a five-point scale would require a minimum of 195 responses. It was expected that some responses would need to be removed at the cleaning stage and that some respondents might not complete the survey. Therefore, the population size, statistical consideration, rules of thumb, and a safety margin were taken into considered to arrive at the selected sample size.

The sample came from three identified groups. The largest group was identified through non-probability sampling: a random sample of 1745 participants was built and provided by the University’s Business Intelligence Unit based on the target population and defined by the following parameters:

- undergraduate (full degree)
• international students with EAL
• first year or final year of study

The second target group was also identified and provided by the University’s Business Intelligent Unit and comprised all undergraduate EAL students eligible for the subsidised IELTS test (IELTS4grads) because they were in their final semester ($n = 230$). Thirdly, all students studying the compulsory English language enhancement courses across all academic groups in the University ($n = 600$) were selected, who were all EAL students and largely first semester. These latter two groups therefore used convenience sampling of a captive sample. Overlap between these groups was minimal and ultimately the survey was sent to 2575 potential participants.

The selected sample was restricted to undergraduates as per the RQs; predominantly for sample homogeneity and consistency across the study. Only students in full degrees were considered; that is, Study Abroad and Exchange were excluded at recruitment stage where possible due to the potentially differing views and/or motivations of a short-stay cohort. International students from Inner circle Anglophone countries (e.g. Canada) who were less likely to be EAL students were also excluded. Students at the beginning and end of their degree were specifically targeted to investigate heterogeneous views and, specifically, any shift in perceptions across the degree program, although all responses were captured and analysed regardless of whether they were first or final semester students. In this way, any ensuing recommendations might be targeted at specific stages of degree.

3.4.3 Survey instrument

No standardised instrument existed on this topic and an electronic survey questionnaire was developed by the researcher, driven by the RQs and underpinned by the principles of best practice from the methodological literature outlined above. A cross-sectional design was created to collect data on current attitudes in relation to the core construct of ELP in higher
education. The survey would provide a robust sequential response to the previous phase of the study, contingent on the key matters identified in the focus groups. Drawing on the grounded theory approach of responding to emergent themes via inductive data analysis (Dornyei, 2007), the items in the survey questionnaire were developed to confirm or deny these suggestive trends.

Demographic and substantive items were developed with consideration given to both coverage and practicality. The preliminary section contained six demographic items related to the independent variables of interest from other phases of the study, namely: gender, first language, academic group, entry pathway into the university, and stage of degree. Five substantive sections were designed to measure attitudes in relation to the central constructs elicited from the focus groups and in relation to the RQs, expressed on the questionnaire in accessible terms for the end user, namely:

- Standards of English
- Challenges with academic English
- Describing academic English
- Improving English at university
- The importance of English

For each of the above five substantive sections, seven to nine items were devised. In this way, patterns and stability of responses could be elicited. Practically, it was a compromise between not causing a burden for the respondent with too many items versus too small a number which would potentially impact the results and internal consistency. For each item, a 5-point Likert scale was used with all items on the scale running in the same direction from strongly negative to strongly positive with a sixth option of ‘I don’t know’ to avoid funnelling respondents into a pre-determined response option. At the end of each of the five sections, an open text box was provided to allow an optional further response on the topic. The final section collected
information related to entering the prize draw. As the survey was voluntary, low stakes and with no intrinsic motivation for students to complete it, consideration was given to easing the burden and keeping respondents motivated to complete all sections during their more superficial and brief interaction with the topic. Few items were reverse worded, for example, and, although Dornyei (2007) strongly suggests mixing up multi-scale items, this was not done as it was felt that keeping items in topic areas would ease the cognitive load for EAL respondents.

Validity is argued by design, which was discussed with methodology experts, piloted with a three colleagues, revised and then trialled with nine student participants from four countries across the main demographic groupings. To enhance validity, during the pilot, students were asked to comment on the clarity of items and how they interpreted them. No major issues were identified with wording, meaning or length of the survey, though minor revisions were made to enhance clarity based on the feedback. The field test also trialled operations and administrative matters such as successful deployment and results collection. The questionnaire was found to function easily on mobile devices as well as PCs. The results of the pilot could not be submitted for statistical analysis to check internal consistency due to sample size but visual checking was carried out to investigate missing responses as well as the range and pattern of responses, of which a variety was received. Given that collecting attitudes via questionnaires is not a 100% scientific activity and that responses are highly dependent on participants’ motivation, mood and other random effects (Larson-Hall, 2010), the best compromise was attempted for the final version of the instrument, which contained 39 items (see Appendix F).

3.4.4 Data collection

The link to the electronic survey questionnaire hosted in Survey Monkey was sent to 2575 participants via University email addresses in the form of an eflyer (see Appendix G) on 10 November 2014 and the survey closed on
November 30 2014. Participants took the survey after the semester had ended and in their own time, accessing it from an electronic device and a low response rate was therefore anticipated. The majority of results were received in the first week with a second wave of responses submitted after a reminder email halfway through the period. Responses continued to be submitted in decreasing numbers for the duration of the period that the survey remained open. The survey was anonymous and identifying data such as names/date of birth were not collected, though participants wishing to enter the prize draw were required to provide an email address so as to be contactable. Email addresses were removed from the dataset. 306 responses were received, a response rate of 12%.

The collected data was cleaned, screened, entered into SPSS and data coded for statistical analysis. Respondents who did not answer beyond the six initial demographic questions were removed from the dataset as were responses from any short-stay Study Abroad students. Any “I don’t know” responses were coded as missing data and reverse coding of items was undertaken as necessary. Visual checking was undertaken for any straight lining especially of “I don’t know” responses, which were not found to increase as the questionnaire progressed, indicating that respondents had given due consideration to the options in each item. After cleaning and screening, the achieved sample available for analysis was 281.

3.4.5 Description of the cohort
58% of the respondents were female and 42% male, showing a slight over-representation by females compared to the population (51% female). Thirty-six first languages were represented. For the purpose of meaningful analysis, the number of first languages were grouped and collapsed from the original thirty-six. Chinese, Korean, Vietnamese, English were retained due to sample size (>4% of the cohort) and due to their representation in the population. The remaining languages were collapsed into three groups: European languages (Dutch, French, German, Norwegian, Portuguese,
Russian, Spanish, Swedish, Turkish), Indian languages (Gujarati, Hindi, Malayalam, Nepali, Sindhi, Sinhalese, Tamil, Urdu), or Other languages (Arabic, Bahasa Indonesia, Farsi, Japanese, Malay, Shona, Swahili, Tagalog). This resulted in seven language groups, each representing >4% of the study cohort as shown in the first pie chart (figure 3.3) below. Responses were dominated by Chinese speakers at 49% and therefore this group was over-represented (29% in the actual population).

All four academic groups were represented (Business/Commerce 47%; Health 15%; Science/Technology 24%; Arts/Social Sciences 14%) with Business/Commerce dominating as in the population, though they were slightly under-represented (63%; 14%; 12% and 11% in the population). The second pie chart shows the breakdown by discipline. In terms of stage of degree, 122 (47%) respondents were in their first semester of study, a further 38 (13.5%) were in their second semester while 79 (28%) were final semester students. The remaining 7% reported being in the third, fourth or fifth semester of their undergraduate program as shown in the third pie chart below. Not all respondents were first semester and final semester due to complexities in University database entries and systemic anomalies related to when some first year courses are undertaken.
Figure 3.3. Pie charts of survey cohort
All but 3%\(^5\) (of the students reported entering the University by the entry pathways provided as options in the survey: language proficiency test 47%; diploma from the University pathway partner 17%; high school in own country 9.6%; DEP 9.3%; diploma or foundation not pathway partner 7.8%; high school in Australia 6%). The most common pathways were language proficiency test and the key pathway partner to the University as per the international study body as a whole, though there were more from the language test pathway than in the population (17% and 47% respectively). It is likely that students did not accurately self-report entering by language proficiency test. Students entering via non-test pathways sometimes sit a test as a back-up option in case of failure in the pathway course and are unaware of which method was officially used to satisfy the entry requirements. It is therefore anticipated that the pathway partner cohort is larger than declared and the language test subcohort smaller. However, their test score is not invalid even if they technically met the entry requirement by completing a pathway partner diploma qualification.

Students were evenly split on their post-graduation plans: approximately one third were planning to return home within six months (31%), a further third planning to staying for less than five years (35%), and the final third aiming to stay in Australia for the long-term (33%). This means that 68% had plans to remain in Australia beyond graduation, either for the short or long term. Overall, the study sample reached an acceptably high level of representativeness from the statistical perspective.

3.4.6 Data analysis

The data were exported to Statistical Package for Social Sciences (SPSS) version 22 for statistical analysis. The data were first summarised for frequency to provide an indication of the distribution and the intensity of response by theme. Then factor analysis was undertaken to explore the relationship between the identified variables.

\(^5\) Students do not always recall how they met the entry requirement, which may explain the 3%.
3.5 Part 3: Statistical analysis of student outcomes data

Part 3 used GPA and IELTS (Academic) test scores at the point of graduation to statistically analyse measurable student outcomes.

3.5.1 Sample selection

The data of all undergraduate students who accessed IELTS4grads (see section 2.4.2) between 2009 and 2012 were used in this study. This component therefore can be said to employ convenience sampling of a captive sample. Although representativeness is not being claimed, it will be shown that the characteristics of the sample do not differ considerably from the entire institutional undergraduate international student body. Students apply for IELTS4grads based on the need for a test score after graduation, mainly in order to remain in Australia, as evidenced by the reasons provided by participants on the questionnaire.

3.5.2 Data sources and instrumentation

GPA
University grades are awarded on a scale of 0-7 for each course/unit undertaken as part of the degree program (see Appendix H). A standard three-year undergraduate program comprises 24 courses/units and a grade is awarded on the seven-point scale for each. Grades accumulate and are averaged across the entire degree program providing a final cumulative GPA at the point of graduation on the same seven-point scale. This cumulative GPA is the score utilised in this study as a numerical proxy for academic outcomes.

The IELTS test
IELTS, jointly owned by IDP, the British Council and Cambridge English Language Assessment (CELA), is a popular English language proficiency test internationally and, in 2014, over two and a half million candidates took the
test worldwide. It is accepted by over 9000 institutions and organisations globally as evidence of language ability for entry to educational institutions, for visas and professional registration (Appendix A). The test provides an overall score and four subskill scores for Listening, Reading, Writing and Speaking in whole or half numbers (called ‘bands’) on a scale of 0-9. The description of the scale is provided in figure 3.4.

<table>
<thead>
<tr>
<th>Band 9: Expert user:</th>
<th>has fully operational command of the language: appropriate, accurate and fluent with complete understanding.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band 8: Very good user:</td>
<td>has fully operational command of the language with only occasional unsystematic inaccuracies and inappropriacies. Misunderstandings may occur in unfamiliar situations. Handles complex detailed argumentation well.</td>
</tr>
<tr>
<td>Band 7: Good user:</td>
<td>has operational command of the language, though with occasional inaccuracies, inappropriacies and misunderstandings in some situations. Generally handles complex language well and understands detailed reasoning.</td>
</tr>
<tr>
<td>Band 6: Competent user:</td>
<td>has generally effective command of the language despite some inaccuracies, inappropriacies and misunderstandings. Can use and understand fairly complex language, particularly in familiar situations.</td>
</tr>
<tr>
<td>Band 5: Modest user:</td>
<td>has partial command of the language, coping with overall meaning in most situations, though is likely to make many mistakes. Should be able to handle basic communication in own field.</td>
</tr>
<tr>
<td>Band 4: Limited user:</td>
<td>basic competence is limited to familiar situations. Has frequent problems in understanding and expression. Is not able to use complex language.</td>
</tr>
<tr>
<td>Band 3: Extremely limited user:</td>
<td>conveys and understands only general meaning in very familiar situations. Frequent breakdowns in communication occur.</td>
</tr>
<tr>
<td>Band 2: Intermittent user:</td>
<td>no real communication is possible except for the most basic information using isolated words or short formulae in familiar situations and to meet immediate needs. Has great difficulty understanding spoken and written English.</td>
</tr>
<tr>
<td>Band 1: Non-user:</td>
<td>essentially has no ability to use the language beyond possibly a few isolated words.</td>
</tr>
<tr>
<td>Band 0: Did not attempt the test:</td>
<td>No assessable information provided.</td>
</tr>
</tbody>
</table>

Figure 3.4. IELTS band descriptions.

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6 http://www.ielts.org/media_centre.aspx
7 http://ielts.org/institutions/test_format_and_results/ielts_band_scores.aspx
Language proficiency tests operationalize the underlying trait/ability of the construct of ELP in order to measure it. IELTS achieves this via the four macro skills, through which underlying micro skills and competences are evidenced. In this study, IELTS Academic is therefore used as an external criterion for measuring general academic language proficiency.

IELTS (Academic) was identified as an appropriate instrument to measure English language proficiency for this study. Although other international academic language proficiency tests exist such as the TOEFL iBT and the Pearson Test of English (Academic) (PTE), IELTS is by far the most prevalent in the Australian context, representing 95% of tests scores submitted for admission at the research site, and this would allow for pre/post comparison where a test had been used at entry. Although the alternative tests mentioned above began to be accepted by DIAC in 2011 as evidence of language proficiency for student visa applications and for other visa types in 2014, for many years, IELTS was the only test accepted for all purposes where language proficiency had to be evidenced, including entry to tertiary institutions, all visa applications (such as Graduate Skilled Migration) and professional registration. IELTS therefore has market penetration and is well known by the target student body.

The second reason that IELTS was identified as the most appropriate instrument is because the University utilises IELTS (Academic) to capture exiting language proficiency through its IELTS4grads initiative as noted in Chapter 2. IELTS4grads is voluntary but the only mechanism that the University has for capturing exiting language proficiency scores of its international cohort. Applicants were required by the University to complete a short survey which provides their reason for accessing the subsidised test (see Appendix I). As evidenced by this survey data, students access IELTS4grads because they require a test score for skilled migration, for employment in Australia, for professional registration (e.g. teachers, nurses, engineers,

8 Renamed DIBP
accountants), or for personal reasons. This means that they were accessing the test for real purposes rather than for research only, which was expected to positively impact motivation to gain the best score possible. IELTS Academic test scores from four years of data collection (2009-2012) were used in this study.

3.5.3 Data collection
The University database provided the following verified data of participants:

- Name
- Date of birth
- Student number
- Nationality
- First language
- Entry pathway (used for university admission)
- Undergraduate degree program
- Grade Point Average (GPA)

Official IELTS (Academic) test scores were provided from the University IELTS test centre database along with the IELTS4grads survey data.

As is often the reality of the research situation, the study is not based on random sampling but on convenience sampling of all undergraduates who accessed the IELTS test during this four-year period. Undergraduate students’ test scores were extracted from the IELTS4grads dataset \((n = 590)\) and merged with the academic data and survey responses. The combined data were cleaned, verified and coded (see Appendix J) before being exported into R Statistical Software version 3.2.1\(^\text{10}\). 564 viable scores were available for subsequent analysis.

\(^{10}\) https://www.r-project.org/
3.5.4 Description of the cohort

The sample is described according to the five categorical variables: gender, first language, entry pathway, academic group, and reason or taking the test.

**Gender**

The sample comprises more females than males with 347 (61.5%) females and 217 (38.5%) males as shown in the pie chart below. According to University Planning and Statistics data, 51.4% of the international undergraduate cohort were female and 48.6% were male in Semester 2 2013. Females are therefore over-represented by 10% in this study in comparison with institutional statistics.

**First language**

Forty-three first languages are represented in the study as shown in the bar chart below (figure 3.5). Participants who speak Chinese (all languages/dialects) are the single largest cohort representing 45% of the entire sample. Korean speakers is the second largest representing 12% and the remaining 41 languages represent <10% of the sample.

![Figure 3.5. Frequency of participants by first language](image-url)
This representation is not dissimilar to the languages spoken by undergraduate international students in the University: speakers of Chinese languages are 29% of the international student cohort and Korean speakers represent 9%. The lack of voluntary uptake from participants from some countries is notable in the study such as the Middle East. Students from the Middle East only account for a small percentage of the undergraduate international cohort but very few access IELTS4grads, most likely because they are often sponsored students who return home after graduating and do not need an IELTS test score post-graduation for work or migration purposes. Overall, there is a diverse sample with close to representative sample sizes in the study.

**Academic group**

Academic group refers to the four groups in the University; namely, Griffith Business School (GBS), Health (Health), Science, Environment, Engineering and Technology (SEET), and Arts, Education, Law (AEL). Representation in the sample by academic group is shown in figure 3.6 below.

![Figure 3.6. Frequency of participants by academic group](image)
GBS international undergraduates dominate the sample at 70%; this compares to 63%\textsuperscript{11} of the whole international undergraduate cohort. The Health group represents 12% (cf. to 14%) of the sample, AEL is 6% (cf. to 11%) and SEET is 11% (cf. to 12%). GBS is therefore slightly over-represented and AEL slightly under-represented in the sample compared to the population but not considerably.

**Entry pathway**

Entry pathway refers to the four main pathways through which international students enter the University; namely, language proficiency test (Test), the University’s diploma Pathway Partner (PP), Language of Instruction (LOI), and the Direct Entry Program (DEP). As can be seen in the figure below, the pathway partner is the most common entry pathway (46%) in the study followed by LOI (30%), Test (17%) and DEP (6%).

![Figure 3.7. Frequency of participants by entry pathway](image)

\textsuperscript{11} Extracted from the University Planning and Statistics database, June 7, 2013
Pathway Partner participants are over-represented in this study but it is arguably the entry pathway that the University is most interested in because it is a major partner, located on the University campus, and whose numerous students are granted admission without a formal language proficiency test. DEP and LOI students are under-presented though Test as a pathway is representative of the whole international sample (14%, 58% and 17% respectively).

**Reason for taking test**

Reason for taking the test is the self-declared reason provided by participants on the IELTS4grads survey at graduation. Reasons include: Migration, Employment in Australia, Further study, personal interest, employment in their home country and other reason. As can be seen in the figure below, the most popular reason for taking the voluntary IELTS test at graduation is for migration purposes (44%), followed by employment in Australia (25%).

![Figure 3.8. Frequency of participants by reason for taking test](image-url)
Together, migration and employment account for over two thirds of the sample, showing that most students take the test in order to remain in Australia temporarily or permanently after graduation. Further study is the third most popular reason at 19%. For practicalities of analysis, levels within this variable were reduced into the three most common reasons (Migration, Employment in Australia, Further study) with the remaining reasons aggregated into Other.

As already stated, representativeness is not being claimed due to the voluntary nature of participation rather than random sampling. However, it can be seen that the proportions by key variable are not far removed from those in the University undergraduate population *per se* and the sample is therefore not an unrepresentative one.

### 3.5.5 Defining the variables

#### Dependent variables

The study is interested in academic success as defined by two dependent variables functioning as proxies for the underlying construct: 1) general academic language proficiency as measured by IELTS (Academic); and 2) academic outcomes as measured by Grade Point Average (GPA).

#### Categorical variables

As noted by Bridgeman, Cho and DiPietro (2015), it is important to separate a sample into meaningful subgroups because conclusions can change substantially as a result. In this study, five categorical variables were identified for analysis, drawing on key demographic and academic variables informed by the literature (Crawford & Wang, 2015; Naylor & Smith, 2004; O’Loughlin & Arkoudis, 2009; Woodfield, Jessop & McMillan, 2006):

1) gender; 2) first language; 3) academic group; 4) entry pathway; and 5) reason for taking the test. Age was not considered in this study and is justified
on the basis that all students were in the typical undergraduate age group and at least eighteen years of age.

‘Gender’ refers to self-declared categorisation as either ‘male’ or ‘female’ as entered into the University database. ‘First language’ refers to the language declared by the student upon enrolment in the University as their first language. ‘Academic group’ refers to the four broad groups (or faculties) into which the University divides its academic elements. ‘Reason for taking the test’ refers to students’ self-declared reason for taking the voluntary IELTS Academic test at the point of graduation.

‘Entry pathway’ relates to how students are granted admission to the University if they are international and their first language is not English. Formal proficiency tests are accepted for entry such as IELTS (Academic), TOEFL iBT, PTE and ISLPR. However, only 16% of Griffith University international EAL students provide evidence of their language proficiency via a formal test and many additional pathways exist which are deemed to be equivalent (Griffith University, 2015b). The most common pathway into Griffith University (27%) is via its main pathway partner, which offers Foundation and Diploma programs to students who have not met the requisite academic and/or linguistic requirements to enter the University directly. Students who successfully complete the Foundation program articulate into first year while those who complete a diploma program at the pathway partner institution or other Technical and Further Education (TAFE) institution articulate into second year of the undergraduate program without taking a formal language test. Another entry pathway is via the Direct Entry Program (DEP) (14%) at the University’s ELICOS\textsuperscript{12} provider. Students enter the ten-week intensive language program at half a band score below the University entry requirement and are assessed during and at the end of the course in order to evidence language outcomes at the same level as the University entry requirement. Lastly, many students are granted admission to

\textsuperscript{12}English Language Intensive Courses for International Students
the University based on the Language of Instruction (LOI) policy (58%). This policy is highly complex but is based on the number of years a student has studied in an English Medium of Instruction (EMI) context. This may be at secondary level or tertiary level for a minimum of two years within the last five and it may be in their country (offshore) of origin or in Australia (onshore) (see Appendix K). Like the other non-test pathways students, these students are deemed to be at the requisite minimum language level without providing formal evidence of it via a proficiency test. In this study, LOI combines all such onshore and off-shore language of instruction pathways except for the University’s main pathway partner. These five categorical variables and the levels within each are summarised in the table below.

Table 3.2

*Summary of Five Categorical Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levels</th>
<th>Details of level</th>
</tr>
</thead>
</table>
| Gender                    | 2      | Male
|                           |        | Female                                               |
| First language            | 43     | Language e.g. Vietnamese                            |
| Academic group            | 4      | Griffith Business School (GBS)
|                           |        | Health (Health)                                      |
|                           |        | Science, Environment, Engineering & Technology (SEET) |
|                           |        | Arts, Education & Law (AEL)                         |
| Entry pathway             | 4      | Language proficiency test (Test)                    |
|                           |        | Language of Instruction (LOI)                        |
|                           |        | Pathway partner (PP)                                |
|                           |        | Direct Entry Program (DEP)                           |
| Reason for taking the test| 7      | Migration                                            |
|                           |        | Employment in Australia                              |
|                           |        | Employment in home country                           |
|                           |        | Further study                                        |
|                           |        | Personal interest                                    |
|                           |        | Other                                                |
|                           |        | No response                                          |
3.5.6 Recoding the scale variables

The two scale variables of GPA and IELTS Academic were also re-coded into ‘Low’, ‘Mid’ and ‘High’ for some analysis. The parameters for setting these three levels are defined and explained here. The University defines ‘high achieving students’ as those with GPAs of 6-7\(^{13}\). At the opposite end of the scale, the University tertiary study rules assert that “tertiary success is determined by achieving at least a grade point average of 3.75”\(^{14}\). A grade of 4 is required to pass an individual course. Paradoxically, however, there appears to be no requirement to meet a minimum overall GPA to be awarded the degree; rather, the Bachelor Degree policy states that “to be eligible for the award of the Bachelor degree, the student will have successfully completed 240 credit points (CP) in the case of a three year degree, or 320CP in the case of a four year degree”\(^{15}\). Of particular interest, then, are those who fall below the pass mark yet who still graduate.

The high level for IELTS was set based on the description of IELTS 7.0 as ‘good user’\(^{16}\). This score has equivalence to the Common European Framework of Reference (CEFR) level C1 (Cambridge English, 2011). CEFR C1 is described as ‘proficient user’ (Council of Europe, 2001). A score of IELTS 7.0 is also set by a large number of professional associations in Australia as the post-graduation minimum for employment, registration, professional membership purposes or for graduate skilled migration visas. At the low end, participants who score below the minimum level required to enter the University (IELTS Overall 6.0\(^{17}\)) are also of particular interest. This is not a score gain study, as most participants did not enter the University via IELTS and therefore pre/post- test scores can only be compared for this subcohort. However, the threshold level required to enter the institution is a benchmark of interest for all participants as it is set on the assumption that this

\(^{13}\) [www.griffith.edu.au/planning-support/business-intelligence](http://www.griffith.edu.au/planning-support/business-intelligence)


\(^{16}\) [http://ielts.org/institutions/test_format_and_results/ielts_band_scores.aspx](http://ielts.org/institutions/test_format_and_results/ielts_band_scores.aspx)

\(^{17}\) The minimum entry for undergraduate study was raised to IELTS 6.5 in 2015
is the minimum linguistic level required to be successful in an undergraduate program.

For this study, then, ‘low’ is defined as GPA ≤4.0 or IELTS ≤6.0. It must be noted that students who fail their degree obviously do not graduate and therefore unsuccessful students are excluded from the sample. ‘High’ is defined as a graduating cumulative Grade Point Average (GPA) of ≥6.0 or exiting IELTS (Academic) test score of ≥7.0. ‘Mid’ refers to levels which fall between the two above extreme categories; that is, GPA 4.1-5.9 and IELTS 6.5. It was expected that most students would fall into this large mid-range group on both measures but we were interested here in the extremes of the scales.

3.5.7 Recoding the categorical variables

The number of first languages (n = 43) was too large to allow meaningful statistical analysis. This variable was therefore re-coded based on sample size. Those comprising ≤ 9% of the whole cohort were aggregated into meaningful language family groups (where possible) to provide the following in order of group size:

- Chinese (Mandarin and Cantonese)
- Indian (i.e. Dravidian languages) (Bengali, Gujarati, Hindi, Kannada, Konkani, Malayalam, Nepali, Punjabi, Tamil, Telugu, Sindhi, Singhalese and Urdu)
- Korean
- Indo-European (German, French, Spanish, Russian, Farsi, Swedish, Finnish, Portuguese, Dutch, Norwegian)
- African (Igo/Igbo, Mauritian Creole, Setswana, Swahili, Shona)
- English
- Vietnamese
- Austronesian (Malay, Indonesian, Tagalog, Kiribati)
- Japanese
• Turkic (Turkish, Kazakh, Mongolian)
• Other (Arabic; Burmese, other)

Figure 3.9 shows this visually. It can be seen that speakers of Chinese languages dominate the study, followed by speakers of Indian languages and Koreans. Due to the small group size which would prevent meaningful analysis, Japanese, Turkic and Other ($n = 16$) were included in the descriptives in section 6.1 but removed from the inferential analysis in section 6.2 and 6.3.

![Frequency of participants by aggregated first languages](image)

*Figure 3.9. Frequency of participants by aggregated first languages*

### 3.5.8 Data analysis

As the data were quite unbalanced, strict tests for effects of various factors were problematic. For example, each Entry pathway did not have students from every First language group, and totals for a particular combination of
factors were sometimes small. However, this is reflective of the institutional student population and likely to be mirrored in other institutions or even English-speaking higher education contexts worldwide due in part to the status of English in the respective countries and/or education systems of typical EAL enrolments noted in Chapter 1. For example, Chinese students are very unlikely to enter EMI degree programs via LOI, whereas Indian students tend to enter via LOI, PP or Test but not traditionally from pre-sessional English language programs such as DEP. If we therefore take the sample as “typical” for the institutional population of undergraduate EAL students, we can analyse the data as follows. First, to address RQ 2.1, we describe the whole cohort using descriptive statistics. Then, to address RQ 2.2, preliminary data plots are used to test the relationship between the Overall IELTS score and the five factors of Gender, Academic group, conflated First Language group, Entry pathway, and aggregated Reason for taking the test. Next, linear regression (Casella & George, 1992; Kaplan, 2014; Madsen & Thyregod, 2011) is used to analyse any patterns in scores by these same factors. Linear regression takes out the effects of the other variables in order to mitigate confounding the effects of these variables as far as possible. This two-stage process is replicated for GPA outcomes. Then multivariate linear regression is used to investigate GPA and IELTS outcomes combined.

3.6 Ethical considerations

Permission was sought and gained by the University Ethics Committee prior to all three parts of the study and participants were provided with the relevant approved information sheets and consent forms (see Appendix M). For Part 1, students were invited to participate and offered a small incentive to participate. Participants were informed that that no other member of staff would be made aware of the content of the interviews and the reason for recording the focus group interviews and how the data would be kept secure.

18 Using the ‘bayesm’ library in the R software package
19 Using the ‘LearnBayes’ library in the R software package
It was clarified that participation would not affect grades; either negatively or positively. For Part 2, additional approval was required and given by the Deputy Vice Chancellor (Administration) to allow deployment of the survey to a large number of students across multiple Schools. Potential participants were sent the approved information sheets and consent forms along with the survey link detailing how data would be de-identified and that privacy and confidentiality would be maintained at the point of reporting or publishing. There was an optional incentive to enter the prize draw to win a $20 supermarket voucher. Students eligible for the test enjoyed a 50% subsidy on the test fee, paid by the University. Due to the large number of international students in the university, it is not possible to identify participating students once names are removed; as such there is limited burden and no risk involved with participation.

3.7 Limitations of study
A large component of this study was premised on student conceptualisations of a complex construct, and it is axiomatic that, as non-experts, their views are constrained by the limits of their understanding. However, as the key stakeholder, their views are critical to understand and take into consideration. The focus groups and survey also provide just a one-time snapshot of conceptualisations rather than longitudinal views and it is accepted that an individual’s views can be dynamic and change over time (Dornyei et al., 2015). This was controlled for as far as possible by interviewing multiple groups and participants at varying stages of their degree. The voluntary nature of the responses also meant that true random sampling was not achievable in the survey, and self-selection can obviously lead to compromised generalisability of the findings, while raising the issue of whose views we may not be capturing. However, the sample shared as many characteristics with the defined population as was feasible, and triangulation via a combination of the focus groups and a survey questionnaire attempted to offset such issues (Dornyei, 2007). It could also be argued that it is only students who are prepared to engage with the topic whose views can be
influenced. Critically, differences in conceptualisations may be attributable to variables not controlled for in this study. Such variables include but are not limited to internal factors such as cognitive abilities (e.g. aptitude), as well as external factors such as socioeconomic status (SES) or first-in-family to study in higher education. Studies on EAL children have shown these to be critical for academic success (Greenberg Motamedi, 2015), and SES and first-in-family status are tracked and used as potential triggers for intervention for domestic university students but this data is not collected for EAL internationals. However, studies cannot investigate all variables and the focus here was on student conceptualisations. Further research might investigate the impact of other variables.

It is acknowledged that IELTS (Academic) does not act as a perfect proxy EAL graduates’ linguistic outcomes. As noted in the literature review in Chapter 2, IELTS (Academic) was designed to assess general academic language proficiency and it may not be tapping into all of the discipline-specific language that students acquired during their degrees (Knoch et al., 2014; Knoch et al., 2015). The disquiet in the language testing community over the re-purposing of IELTS has led to further studies on its suitability for employment, for example. It is of course impossible to sample for every eventuality in a test, but recent studies are suggesting that there is indeed adequate “rhetorical overlap” for IELTS to be used as an indication of ELP readiness to enter other domains of practice (Knoch et al., in preparation; Moore et al., 2015, p.39). An alternative would be to utilise discipline specific tests; however, few currently exist and, such tests are problematic in conceptual and practical terms as explained in section 2.4.2. For this reason, the IELTS partners deliberately eschewed specificity as they found it is “almost impossible to implement a large-scale test of academic language proficiency with different versions for a range of discipline areas” (Read, 2015, p.136). Some argue that using any test raises the issue of hegemony whose view we are interested in: the expert opinion of a language tester does not reflect how performance is realised in real life by means of interaction
co-construction, nor does it acknowledge that the final ‘judge’ of linguistic ability is typically a non-expert end-user such as an employer. Others that ELP should not be tested separately from disciplinary learning at all, but as it is not currently explicitly or consistently assessed in undergraduate degrees, a compromise needs to be found if we wish to explore ELP at graduation. IELTS (Academic) is therefore utilised in this study with the full understanding that it is a contested and imperfect proxy for graduating ELP, but the most pragmatic option currently available.

In relation to the outcomes data, as is often the reality of the research situation, the study is not based on random sampling. Although the sample shares many characteristics of the defined target population, generalisability is not being claimed and it is predominantly an exploratory study. However, it is arguably this very subcohort that is of most interest to policy makers as they are the students who enter the local workforce and/or migrate to Australia. This cohort is also of interest as students opting to take the test at graduation are likely to be motivated and possibly indicate ‘best case scenario’ student outcomes. Due to sample size and the number of participants per variable, first language was aggregated and this may have impacted findings by obfuscating patterns for smaller groups. It is also acknowledged that human behaviour cannot be reduced to a single number such as a test score.

This study was undertaken at a single research site so further replication would be desirable in other institutions and contexts. It is also accepted that, as with all social science research, every decision taken by the researcher can impact the ensuing findings. Decisions were therefore justified and documented as far as possible at each stage for transparency and replicability.
Chapter 4: Part 1: Focus group findings

This chapter presents the findings of Part 1: focus groups, which explores student conceptualisations of AELP, in order to address RQ1.1 and 1.2:

1.1 How do undergraduate international EAL students conceptualise ELP within higher education?
1.2. Is there any systematic variability in conceptualisations correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or stage of degree?

This stage of the research is shown in the visual below:

![Research design Part 1](image)

*Figure 4.1. Research design Part 1*

In this chapter, student views are quoted extensively during the data analysis to represent the viewpoints of the subjects and maintain the strength of their voice. As students are the key stakeholders whose views have value in their own right, this approach attempts to avoid the stereotypical discourse sometimes found in relation to EAL students (Haugh, 2015, in press). As outlined in the Methodology chapter (section 3.4.6), the findings are divided into two sets of themes: protocol-drive themes, which are based on the pre-set topics of the semi-structured interview protocol, and data-driven themes, the topics arising from the participant responses (Miles & Huberman, 1994).
4.1 Protocol themes

Student comments in relation to the interview protocol were aggregated into seven main themes. While frequency counts are not necessarily indicative of depth of understanding due to the qualitative nature of the findings, it is nonetheless interesting to note how the comments ‘fractured’ (Maxwell, 2005; Strauss, 1987). The number of comments related to each is provided as a measure of relative intensity of the recurrent theme.

Table 4.1

*Tabulated Topics and Number of Instances of the Protocol Themes*

<table>
<thead>
<tr>
<th>Topic &amp; subtopic</th>
<th>Number of instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining AELP types of ELP</td>
<td>23</td>
</tr>
<tr>
<td>ELP at various stages of studies at entry</td>
<td>51</td>
</tr>
<tr>
<td>improving ELP during degrees</td>
<td>72</td>
</tr>
<tr>
<td>the standard required to pass a course</td>
<td>23</td>
</tr>
<tr>
<td>the standard of ELP required at different stages</td>
<td>31</td>
</tr>
<tr>
<td>at graduation</td>
<td>79</td>
</tr>
<tr>
<td>The use of first language (L1) during studies</td>
<td>25</td>
</tr>
<tr>
<td>Roles and responsibility for developing ELP</td>
<td>65</td>
</tr>
<tr>
<td>The perceived importance of ELP</td>
<td>35</td>
</tr>
<tr>
<td>The reason for selecting Australia</td>
<td>43</td>
</tr>
<tr>
<td>Defining the successful international student</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>478</strong></td>
</tr>
</tbody>
</table>

4.1.1 Defining Academic English Language Proficiency (AELP)

This section reports on student definitions of AELP. It also draws on the related subtheme of the type of ELP required in varying contexts. Comments on this topic were derived from all transcripts but accounted for less than five per cent of any transcript. Unsurprisingly, as they are not linguists, students
struggled on the whole to articulate definitions of AELP, and the interviewer felt that this was one of the most challenging topics from which to elicit a response. Participants understandably tended to compare AELP to other aspects of language use in their experience.

Participants were highly cognisant of the fact that AELP differed from the ELP required in other situations. One participant noted: “I think academic English, well let’s say University English, is different from not only workplace but also everywhere” (Participant 11\(^20\)). There was recognition that it is necessary to learn AELP as a distinct type of language:

> So I think University English has all their own characteristics and the other place, well, we have to change our language....We have to get used to it in many places and in many situations. (Participant 11)

Many of their responses contrasted academic English with other contexts such as daily life, which were sometimes referred to as ‘normal’ situations. They commented that “basic English is you just like you’re writing just normal without, academic” (Participant 16), with conversation generally seen as requiring less effort “because conversation’s like natural and academic is, you don’t have to think about it” (Participant 18). AELP was also regularly contrasted with English in part-time work contexts: “Like if you got a part-time job, like corner shop or restaurant, you always didn’t use academic English. You just use normal words and to talk to the people” (Participant 23). While many cited the informal language needed in the workplace, they also were aware that this context required formal language as well, depending on the communicative purpose of the interaction:

> When you write report for your manager or you do some presentation you need to use academic language. Like is the same when you use in

\(^{20}\) For the profile of each participant, refer to Table 3.1 in the Methodology chapter
university. But when you like talk to the, your colleagues like in the normal conversation you use the speaking English. (Participant 24)

One student articulated multiple contexts of use by contrasting the language she had learnt to pass her language proficiency test with other contexts: “After I finished my first semester and I start looking for some part time job, I realised that there are three kinds of English. English at uni, English at work and English for IELTS” (Participant 10).

Students were invited to describe how AELP differed from the language used in other contexts. There was strong consensus of disciplinary differences: “because for me I’m doing Health Science, some are doing Law so English is different from field to field” (Participant 14), while “Engineering is different language to normal English” (Participant 37). Others made similar comments, choosing to contrast degree majors:

I think it’s more related to your major or your course. For example, I think most of us major in something related to business so maybe business English is very, we use business English in class but maybe for some students who study law it’s quite different. (Participant 2)

There was also the perception of a higher degree of formality in AELP: “the language used is not so much speaking language but not that formal as academic” (Participant 13) and “I think you can’t write down what you speak with someone else, it has to be more formal and structured”. One described it as “a lot more objective” (Participant 15). Several used the term ‘professional’ to describe AELP but perhaps was referring to a more formal register: “I feel it’s different to most of the situations because it feels more, more professional” (Participant 15). This degree of perceived formality was also evident to them with regard to lexical appropriacy: “you will use more formal word in academy word” (Participant 7). Vocabulary was, in fact, one of the most common topics of discussion; as one students said: “to me the
difference between academic and daily life English is the vocabulary”. Vocabulary is discussed as a separate theme below.

Several students commented that AELP is easier for them to understand than everyday English: “I think English is more difficult in the common language when we talk to each other” (Participant 29). One reason suggested for this was the clarity of delivery by teaching staff, possibly due to their awareness of an EAL audience. There was a suggestion that AELP might be a more standardized variety. As one participant put it:

I think the academic English is something like, just like a melting pot, a lot of people with different accents. Like Indian people and also Australian people have an accent, German people. They try to use the academic English. And then it’s, that’s something like the common way to speak, so it’s perhaps academic English is the easiest way to speak because everyone will understand it (Participant 30).

While many agreed that AELP might be easier to deal with receptively than everyday language, their own written production posed more challenges: “I think conversation is more easier for me than doing academic” (Participant 18) because “if we just talked to the other people we can talk, the movie, TV or other place but the academic English we need to research and to make the, make your words more professional” (Participant 23). The importance of reading and writing in AELP was noted: “Well I think academic English like at university is more concentrated on writing and reading” (Participant 6) while another commented “Yeah like more likely listening and speaking in our daily life and academic is more likely reading and writing” (Participant 6).

When asked how or when they realised that AELP differed, students in several focus groups laughed at the question and responded enthusiastically “first day!” (Participant 29) and “just open the first page!” (Participant 6).
Some realised at key moments in their studies: “I studied IELTS test and I learnt the differences between like spoken language and like academic English” (Participant 6). For many there was a watershed moment towards the beginning of their degree studies when this became apparent.

In sum, students report awareness that AELP differs from the language used in other contexts including everyday language and the workplace, an understanding that is consistent with extant models (Harper et al., 2011; Mahboob, 2014; Murray, 2010; O’Loughlin & Arkoudis, 2012). Discipline-specificity, particularly in terms of vocabulary is evident to them, along with a perceived degree of increased formality as noted by experts (e.g. Anstrom et al., 2010; Cummins, 2000; Lea & Street, 2000). In the academic context, participants view the macro linguistic emphasis to be on writing and reading rather than speaking and listening and, whilst receptive understanding might be easier, production of AELP causes challenges. It is clear that these students understand that language is differentiated according to the context of use and the intended purpose of communication.

4.1.2 ELP at various stages of studies

This next theme documents the comments in relation to ELP at various stages of their studies: entry, during the degree, at graduation and beyond. It also reports on their comments regarding ELP improvement during their degree program and whether they perceive any increased expectations as the program progresses as suggested by some scholars (Barrett-Lennard et al., 2011; Chalmers et al., 2010; Harper, 2011). The number of references made in relation to each subtopic is provided in the table.
Table 4.2

Tabulated Topics and Number of Instances at Various Stages of Studies

<table>
<thead>
<tr>
<th>Subtopic</th>
<th>Number of instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>At entry</td>
<td>51</td>
</tr>
<tr>
<td>Improving ELP during degrees</td>
<td>72</td>
</tr>
<tr>
<td>The standard required to pass a course</td>
<td>23</td>
</tr>
<tr>
<td>The standard of ELP required at different stages</td>
<td>31</td>
</tr>
<tr>
<td>At graduation</td>
<td>79</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>256</strong></td>
</tr>
</tbody>
</table>

**ELP at entry**

The majority of students across all focus groups readily stated that their language was not good enough at the outset to undertake an EMI degree. While a certain degree of social desirability response bias might possibly explain this, students might equally wish to present themselves in a positive light. As this cannot be determined, responses were taken at face value. The interviewer also felt that the readiness with which students suggested their retrospectively inadequate language competence, along with their follow-up comments, suggested that this was a genuine view rather than a modesty injunction. One participant stated that she nearly gave up and returned home on account of the linguistic challenges she experienced: “At the time when I first come here I don’t think I can do the Accounting in English. Even I talk about going back to Vietnam” (Participant 10). Despite this initial view of inadequate ELP, many felt they had improved, even those still in their first semester. A small number who had come via Language of Instruction (LOI) pathways or via EMI secondary schools felt that their English at entry had been adequate, though they also noted some improvement since commencement: “I thought I had adequate English skills to start off with but yeah I’m definitely improving my English day by day” (Participant 20).
Students were aware of the minimum requirements to commence their degree. One suggested that a threshold was expected: “I think university expect us to have some level of English. I think they expect us to not come here and start from the beginning to learn English” (Participant 5). There was also general acceptance that if their English were better, they would find their studies easier: “Yeah, if I, my English is better, I was thinking about grammar or the vocabulary where I answer the questions, I could be, I would be more confident when I do the answer or other drafts” (Participant 29).

Challenges cited at the beginning of degrees centred on understanding lectures, especially because of perceived pronunciation issues and speed of delivery (discussed further below). At the outset, students also felt that they needed time to translate and process the content: “I think I need more time to comprehend what the tutor has said compared with other native students” (Participant 2). Writing and group speaking tasks caused particular concern: “Group discussion and communication with local students, that’s the difficult thing for me” (Participant 13). Students showed awareness that previous studies may not have adequately prepared them for EMI study: “In Korea, normally you don’t teach like conversation things in English; they teach just grammar, so it’s hard to improve...so it was difficult the first time” (Participant 33). Some felt it was easier to learn English in the Australian context:

With Australian study, they have like very different standards as well, like back in my country it was a different standard, the way you speak or teach English. Over here, like I found it was quite different and it was better for me to learn or improve my English side of it. (Participant 34)

Retrospective poor views of commencing ELP are consistent with some of the literature, such as Schweisfurth & Gu (2009), who found that perceived challenge rose from 7% before degree commencement to 44% afterwards.
Overall, students appear to experience initial difficulties and report a steep learning curve in relation to language development. This is consistent with the literature related to adjustment challenges (e.g. Andrade, 2006; Phakiti & Li, 2011) and concerns over commencement levels by scholars (Arkoudis & Starfield, 2007; IEAA, 2012; QAA, 2012).

**Improving ELP during degrees**

The students interviewed generally considered their ELP to have improved: “Yes, definitely it’s improved significantly for first year of going to university” (Participant 35). They also had high expectations that it would further improve by graduation, mostly as a direct result of immersion and time spent in an English-speaking context. They commented that “the university environment is helping” (Participant 33) and that improvement occurs “just by doing assignments”. As one noted:

> The fact that we are actually mixed with people who are proficient in English …interacting with those people with a group assignment or just hanging around, hanging out together, I think that that helps a lot. (Participant 34)

The majority therefore assumed that language acquisition would take care of itself, occurring incidentally as a result of immersion in the second language environment. A small number cited methods for improving their language skills, though these were not widespread and rather generic:

> We have to do many things to learn some vocabulary, to watch TV, for example, the news in English so that we can improve everyday on English because if we just attend the lecture, I don’t think if it will help us to, it’s not enough. It helps but we have to do more. (Participant 31)

A few identified opportunities to use English generally such as getting a
part-time job, making friends with various nationalities, or by joining volunteering societies.

Many commented that it is possible not to improve if you socialise with friends of the same nationality and that many students don’t try: “maybe they feel more comfortable speaking their own language. Yeah so they don’t try to improve their English” (Participant 15). There was recognition that the opportunity to improve ELP could be exploited: “you meet people from different backgrounds so you’re kind of exposed to speak English the whole time unless you’re sticking with people from your own background” (Participant 36), though some students were finding it a challenge to improve because of the high number of international students from certain nationality groups in their courses:

When I was in Sydney what I felt is that because there are lots of Chinese in Sydney and I was the, I think there were only two Vietnamese in that class and I felt like I heard Chinese more than English. And throughout all the time I spent in Sydney I didn’t learn any English at all because I didn’t have any chance to listen to that. (Participant 15)

Some commented that, in order to improve, students needed to make some personal effort, to exercise agency to use English rather than their mother tongue:

So it really depends on students. Some people they just say oh I want to study, I can self-study, I don’t even go to the lecture, I just listen to lecture capture, doing the slides and go but some students they more like the social life and they’re going to go out there, practice their English (Participant 9).

There was also commentary regarding the link between improvement and the intrinsic motivation to do so, such as the desire for post-graduation employment or residence, which is explored further in the theme of
motivation below.

I’m not talking about all international students but some, those who have a aim that they want to stay in Australia, they will definitely want to increase their proficiency by the time they finish their study. (Participant 3)

These views mirror the critical role of motivation and agency noted in the literature for improvement to occur (Arkoudis & Tran, 2007; Craven, 2012; O’Loughlin & Arkoudis, 2009; Sawir et al., 2012; Xu, 2012). It departs from the literature in the sense that ELP improvement does not happen by osmosis (Rochecouste et al., 2010) as some participants seemed to assume.

*The standard required to pass a course*

Students were asked to comment on whether good AELP was required to pass an individual university course. There was considerable consensus in the responses that it was certainly possible to pass a course without good English “I think pass a subject just means you just get a knowledge of this subject. It doesn’t include you have very good English in the subject” (Participant 23). There was discussion around language-based versus technical subjects, with the general view being that inadequate language might be a barrier for language-based subjects but for technical subjects “you can still pass, like even with like low level English and like you know, understand just by signals and signs even” (Participant 36). There were several comments around the impact of assessment types on passing a course because some Engineering and IT courses focused predominantly on mathematical and technical ability.

One reason for being able to pass with weak English was related to the perception that discipline academics concentrated on content knowledge not language:
They focus more on the content rather than the grammar, you know, the English part of it. So sometimes, even though we finish, that doesn’t mean your English is improved and doesn’t mean we can communicate with the local people. (Participant 13)

This view of limited feedback on ELP by academics is corroborated in Knoch et al. (2015). Not all participants agreed you could pass with poor ELP:

No, I disagree. You might be having the knowledge but if you can’t put it into words in English how can you convey, how can you get through your exams. I think English is very important for getting through your subjects (Participant 20).

However, good language skills were viewed as essential to getting a high grade: “I think you can’t get a good degree from law, for example if your English is bad” (Participant 27). Students seemed aware of a gulf between a basic passing grade and a high grade: “I think the difference between passing a course and getting a high distinction is far too big” (Participant 30). This is consistent with the findings of Ransom et al. (2005).

*Standards of ELP required at different stages*

This theme explored the idea of differing standards expected of students’ AELP at different stages of their degree discussed in the literature (Arkoudis, 2014; Arkoudis & Doughney, 2014; Barrett-Lennard et al., 2011; Chalmers et al., 2010; Harper, 2011). There was consensus from participants that expectations increase as the degree progresses. At the beginning, expectations from lecturers were viewed as relatively low:

In my first year the lecturer was like saying, oh international students it’s, it’s not really like a big deal for you to make a mistake in your exam because of grammar but as I go through the second and third year, well in
the second year you learn kind of like a group assignments and then the third year you have to make a good report which really requires a lot of comprehensive English. (Participant 17)

Another contrasted expectations at undergraduate level with higher levels of study: “So for the postgraduate a teacher expect more from them to write more in their reports and stuff, but for undergraduates it’s not that strict” (Participant 34). Several commented how little they were required to write in the first year or two of their program: “My degree we don’t really do a lot of writing reports and stuff. We only did one in Semester 1 last year” (Participant 36). The limited requirement for writing output was perceived as impacting the desire to improve in some cases and this has been noted elsewhere (Knoch et al., 2015).

However, in contrast to other research findings (e.g. Haugh, 2015), academics were generally perceived as encouraging students to develop their AELP in the early semesters: “She just told me that you still have many years to go in your Law degree so you should better improve your grammar and try practise writing and stuff” (Participant 8). There was recognition of different language expected from academics towards the end of the degree “because if they reach to their final stages of their education they’ll need that particular English so that they can prove it in their studies” (Participant 1).

As well as language expectations, the level of difficulty regarding concepts and content knowledge are also perceived to increase over the program: “It’s getting deeper. The assignments are getting more difficult not easier” (Participant 8) while first year was viewed by the students as more basic:

When you start uni first years they’re like, it’s like a basic, they want you to learn just a basic one. Second year is getting, they want you to meet this what they want, you know, advisors they want, like second years. Third year is kind of more like, you know, it’s like oh you’re third year
now you need to do more [laughing] than what you did in first year so yeah. (Participant 16)

Although most students had a view that expectations increased, participants towards the end of their degree were much more focused on the standard required beyond graduation: “It’s just like looking more like towards the, you know, the end of it, what’s happening. I think more about job interviews and things like that” (Participant 16). Students were particularly aware of the high standard of language required for the workplace, consistent with what has been said in the employability literature (Arkoudis et al., 2009; Birrell, 2006; DEEWR, 2009; Gribble, 2014, 2015; Hawthorne & To, 2014; Lawrence, 2015; Robertson, 2011).

**ELP at graduation**

ELP at the point of graduation has already been discussed to some extent in the previous subthemes with the general view that students expect and perceive the need for improved English by graduation. As one student put it: “Proficiency, this skill is so crucial for job finding. It make you so competitive. It’s crucial” (Participant 35). A few commented on whether they were currently ready to graduate. A student nurse said: “Like even now, I’m in my third year, but I’m not sure if my English is good enough to have me graduate” (Participant 10). Some students had a view of where they needed to be; one noted that he was not yet at the requisite level yet:

Because when you graduate it means you’re ready to go to work, right? But by the time, I think I will have some skills to work but in the industry we need to explain how it works to other people, right? But I don’t think I can do that 100%, so I think my English needs to be improved.

Another expressed it as follows: “When you’re dealing with people you to express what people understand, so if you can’t do that then your English
One participant described university as the training ground for graduation and beyond:

At uni you, you know, it’s sort of that advancement that you go through and make that progress to be able to cope with the real world situations. Like I know it’s more practical in the real world; people expect you to already know those stuff and you know, handle tasks. (Participant 36)

Not everyone assumed there would be an increase by graduation, however. As noted earlier, Engineering and IT students commented that “for some degrees, language might be more important than others” (Participant 36) because “if you’re doing a Mathematical-based or Engineering thing, things that aren’t language-based it doesn’t, it wouldn’t really change (Participant 37). Another admitted that students might not reach their expected or desired level: “I think everyone want to work at English, but not all of them can get to the level they expect” (Participant 24). On the whole, responses focused on the macro linguistic skills, with students generally perceiving their reading and writing to have improved during their degrees but not their speaking ability.

The majority of students were convinced that their language would and should improve during their degrees, largely by dint of the fact that they were studying in an EMI context, or as a result of personal effort. This contrasts with the literature which shows that this is not necessarily the case (O’Loughlin & Arkoudis, 2009; Craven, 2012; Knoch et al., 2015) and that their English language skills are often viewed as inadequate by employers (e.g. Gribble, 2014). Students were aware of the increased demands cognitively and linguistically as their undergraduate program progressed, however, though some viewed the amount of improvement to be partly dependent on the degree-type.
4.1.3 The use of L1 during studies

Participants were asked to comment on the extent of L1 use for their university studies. There were twenty-five comments on this from all focus groups. Some students reported translating from English to their L1: “Sometimes if tutor talks too much things or talk fast so we have no time to translate to English. So you think it in Mandarin” (Participant 25). Some felt the need to translate to extract meaning “because the English not our first language we need to translate in the mind and to know the meaning and to understand the teacher” (Participant 22). There were numerous comments about the need for more time to process content in the L2. Most of the students who made such comments were early in their degree. No mid-degree students commented on using their L1 and only one end of degree student said they did. Most students beyond the early stages of their degree said using their L1 was not helpful.

A number commented on their perception that using L1 was not appropriate: “I usually think in Vietnamese but like I think it’s not a good thing but like it’s a habit, so ... like when I study, like if I’m with the people of the same culture and speak in Vietnamese it’s not so good” (Participant 24). Others had tried using L1 but found it unhelpful and had switched to predominantly operating in English: “if I wrote an essay in German I might do it and translate later, but it’s just impossible. It sounds really weird and so I think normally we try to do it in English now” (Participant 30). Some found it too confusing to translanguage: “But for me it’s too difficult to use two languages to study. And when you’re thinking, and making notes, taking notes all the time in English, it’s much easier for me” (Participant 13). Others did not use their L1 because of some recognition that there is different logic or rhetorical patterns in different languages: “Because the logic is different. When I translate Chinese to different it looks strange” (Participant 29).
Overall, the use of L1 was seen as necessary for some early in their degree to get them through, though fundamentally viewed as inappropriate or undesirable, and less unnecessary later on.

4.1.4 Roles and responsibility for developing ELP

Participants were asked to comment on roles and responsibilities for developing ELP during their degrees. The GPPs and ELSHE noted in section 1.3.3 state that the responsibility is largely the institution’s but also shared with the student (AUQA, 2012; DEEWR, 2009). No suggestions were made by the interviewer regarding who or what might be responsible but sixty-five comments across all transcripts were collected on this topic. There was again remarkable consensus in response to this question, with students being strongly of the view that the responsibility was theirs, several citing (in separate focus groups) an 80-20 split: “It’s 80 percent our responsibility because we have to pass the course” (Participant 30). Another noted that “students have to be more assertive at University because we are here to learn; it’s not their responsibility to make us learn” (Participant 12). Two participants said it was entirely the responsibility of the student but added that there were additional expectations beyond language competence:

Yeah, I think 100% it is ours, but English is our, is mostly our responsibility but some lecturers they said, they assume like more than English languages, like they assume us like we have more knowledge about our subject. So yeah, that’s other thing, other than English. (Participant 33)

Mid-degree students commented that discipline staff expected students to have the requisite ELP as well as relevant academic knowledge: “Yeah, because lecturers, they just expect you to know…they assume a lot” (Participant 36).
Some commented that it was the student’s responsibility to improve ELP because they had made the choice to come to study an EMI environment, a view expressed in separate focus groups and which corroborates findings in Haugh (2015):

I think the decision you make to choose Australia as your place to study for, no matter for a degree or a masters degree, it’s your choice. You choose to study here so you know Australia use English so it’s your responsibility to learn it. (Participant 7)

I do agree because we’re in an English speaking country, so if you’re going to study then you can’t really expect that the university is going to be able to offer you specifically the same degree in a different language. So you may as well do your best to, you’re here for a reason. So if you wanted to study in your own language you’d study in your home country. (Participant 37)

Yet there was also consensus that not all students tried to improve; motivation was identified as a key factor:

Yeah, the intrinsic motivation is really important. If you don’t want to learn, no-one can force you and it’s really hard for anyone else to because you are adults and no one can force you to do anything. It all depends on yourself. (Participant 13)

Some explicitly commented that academic teaching staff were not responsible for developing AELP “because for lecture’s responsibilities is just give you accounting knowledge they don’t have any responsibly to teach you like English grammar and vocabulary” (Participant 23). Others felt that that it was a shared responsibility between the student and the teachers:
I think the student has the overall responsibility. But sometimes the teacher also needs to have, because we can’t have perfect English to come in to school. So for international students I think maybe teacher need to put some, like vocabulary and main points, maybe in the internet for international students. (Participant 25)

Some saw the responsibility residing at the institutional level rather than with the individual academic, citing reputation and quality outcomes as a key reason to ensure graduates have good language skills:

First of all I think it’s our responsibility. But then I also think it’s the responsibility of the university if they want to be a very good university and want to have a high image, for example. Then it’s very important that you don’t have students there that can’t speak English at all. (Participant 30)

There was awareness of reduced support at the university proper in comparison with pre-sessional EAP courses, reminiscent of Cummings (2006) knowledge continuum (see section 3.7.2): “When in study in DEP, if we miss some problems we can ask for help from our tutors. But when we are studying in university, nobody help us” (Participant 29). Others were satisfied with the additional support offered by the institution: “the university supports with all services, so I feel that I have someone who will help me if I struggle. So I feel pretty confident in this way with, someone will always help me” (Participant 35). Many were aware and appreciative of the support provided: “Participate to many workshops to help your proficiency in English, you have some consultations….Everything is there to improve your English” (Participant 31). However, in practice, it was felt that there wasn’t time to focus on English due to competing priorities from ‘real’ university work:

But I think in EnglishHELP it’s also a problem that the time is really short and then the lecturer they are really good but yeah, so I, grammar, there’s a
focus in WordUp and he’s really good but he can’t do so much stuff because there’s only 50 minutes. And I think for language it’s really too short and so he always can only can give us examples and then gives us papers and then he says try it at home. But at home we have to do so much stuff for the real university and then so you don’t do it. (Participant 27)

In all, students reported the view that they are predominantly responsible for their own AELP development but that there was some additional responsibility from the institution and individual teaching staff. A view of shared responsibilities is consistent with the GPPs (DEEWR, 2009), ELHSE (AUQA, 2012) and the distributed responsibilities posited by Arkoudis and Doughney (2014).

### 4.1.5 The perceived importance of ELP

The next theme reports on perceptions of the importance of ELP for university studies and beyond graduation, about which thirty-five comments were received. Many students felt that English was important and “the first barrier you have to cross” (Participant 7). It was even described as “one of the most reasons to be successful” (Participant 14). One student said they would not have come to Australia if they hadn’t thought English was important (Participant 33). Another felt the question was superfluous:

> Of course it’s important; every material is in English, everything is in English. How you could possibly say it’s not important, anyway? Yeah, the questions are so obviously, it’s two plus two is four. (Participant 35)

One IT student viewed their English level as critical: “I want to improve really. I feel that communication, especially in my degree as my degree is IT is significant. It’s almost as important as actual skills”. Not all students it was important at university, especially Engineering and IT students: “I think it depends on the, what you’re studying. For some degrees language might be more important than others”.

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While the majority of students indicated the importance of English, those who were mid-degree and nearing graduation were particularly aware of its post-graduation relevance, stating that:

Everything that relate to your future is about English. The core thing is about English. If you’ve got better English skills, you communicate better with local people the better future you’re going to be. (Participant 13)

It was seen by some as vital for getting a job anywhere in the world:

I want to work in software engineering, and a lot of software engineering is outsourced, like there is very few companies in Australia that have job opportunities for software engineers, where in overseas like USA there is heaps, like you can just go, all the big tech companies in San Francisco or elsewhere. So knowing English and being able to speak English, that really helps, like you know, globally you can just go to any country and you wouldn’t have to like necessarily learn the local language to find a job (Participant 36).

One student commented that ELP mattered more in the workplace than at university because there were greater expectations and consequences: “in the university you just, I think the expectations are, it depends on how much effort you put into things like it’s not, okay, there is no consequences as much, I think” (Participant 36).

It was also seen as critical for migration prospects as the following exchange demonstrates:

To keep studying in University in Australia, English is not the most important factor I think. It’s not a most important feature. However, if
you want to live in Australia, English is most definitely the most important one. (Participant 11)

I have to say that the Immigration Office know as they try to separate those three things: study, find a job or immigrate, those three different things. So if you want to study in Australia and then get a degree, you don’t require much of English skills but if want to work there or immigrate to fit in the Australian culture that’s definitely different. (Participant 13)

The theme of fitting in to the local culture and community was common, consistent with the employability literature (Gribble, 2014), and there was general recognition that ELP was particularly important if you planned to stay in an English-speaking country:

When you stay here, it’s very important because you work for the Australian people, so you need to speak English but when you come back to your country, your English is your competitive advantage compared to other. (Participant 23)

There was slightly less agreement regarding its importance if students planned to return to their own country, with many believing it depended on professional and future plans. Some felt it was still vital. One commented that good language skills were a “weapon to get a job” and even more important than their own language:

I think it’s important even we come back to our home country. Because even in the country in China they also focus on your English level. Yeah, English is very important, even than our mother language. (Participant 29)

English was noted as important because of its place as a global language: “I think English has become like a universal language now, so obviously a person needs to know English in order to perform really well” (Participant
34). Its importance for getting some jobs was also noted, even for degrees where language competence was not deemed as critical for success:

I think it depends on the personal goals of the person, it depends what they want. And knowing English, it definitely helps because you know, nowadays a lot of the things that outsource, even in Australia, working in software, like a lot of the designing is done in China because if they didn’t know English they wouldn’t outsource it. So they have to know English. So in a way it really helps, like you know, knowing English you would be successful wherever you go (Participant 36).

Interestingly, most of the comments made in relation to the importance of ELP were not in connection to its role during university studies but rather for post-graduation purposes. There was strong consensus of its importance, consistent with the literature of the critical role of ELP for academic success and beyond, and this differs from the mismatch in views between EAL graduates and employers reported in other studies (Arkoudis et al., 2009).

4.1.6 The reason for selecting Australia

Participants were asked the reason they had opted to come to Australia to study because such motivations might reveal the role of ELP in that decision. Forty-three responses were collected on this topic.

Participants suggested that many had not actively selected Australia. In some cases, other family members had already studied in Australia and it was selected due to familiarity: “I come here as my parent’s idea, so they said I have to improve and my brother Australia very beautiful you can go there: (Participant 24). In other cases, choosing Australia had been a joint decision between parents and the student: “For me I want to go to the outside and to see the world. And for my parents they wanted to have a good future, so they spend money and to support me the study in the other countries” (Participant 22). For others, students came to Australia as a result of existing agreements
with their home country institution, such as 2+2 degree or exchange agreements. It was suggested that in some cases students may not want to come at all: “I think some students doesn’t even want to be here to be honest” (Participant 12). While another admitted “I don’t want to be here. My parents just send me” (Participant 12).

Reasons cited for selecting Australia included the proximity to their own country in comparison to other English-speaking environments. Australia was also perceived to be safer ("less gun than United State") and less discriminatory than some other possible study destinations: “I think that because Australia is more multi-cultural country so there would be a very very small amount of discrimination and stuff compared to UK or USA” (Participant 8). This knowledge of Australian culture and perceptions of friendliness positively influenced the selection for some.

In some cases, Australia was actively chosen due to the perceived standard of education in comparison to their own country: “To me the most important reason that I choose to study in Australia is because of the education system itself, that’s the most important thing. Because I believed before I entered Uni in Australia, Australia has more participative and two-way communicating education system than in Korea. Rather than just for English, just for improving English” (Participant 11).

Many students cited improved opportunities, such as for permanent residence or future job prospects, as the following exchange demonstrates:

I wanted to improve my English. I could choose different, many countries; I could have chosen some Spanish-speaking countries, but I thought that of course for your career it’s better to have a good level of English because you can have more easily a job when you, it is a skill that is required for your employers. (Participant 31)
Yeah, if you come from a different country where they don’t speak English but from that way you can apply for different countries to, for a job prospective as well, so it kind of gives you more opportunity. (Participant 34)

Overall, the opportunity to improve their English was additional rather than the key driver for coming to Australia to study.

4.1.7 Defining the successful international graduate

Students were asked to define their view of a successful international graduate; thirty-one responses across all focus groups were provided. Most students identified both good academic grades and a high standard of ELP at graduation as essential for success: “Get to graduate with a high mark, speak in fluently English, really engaged in the study something, some culture from the culture you’re studying in and maybe get good a job” (Participant 24). Some had very high expectations: “For me a successful international student is that you get marks above the average and above the domestic average” (Participant 30). For some participants, these outcomes in relation to grades and ELP were regardless of where they planned to reside and work:

I think a successful international student is the one who will have good English and good GPA and it doesn’t matter if you choose to keep living here or you move to anywhere in the world, the better English you have, the better job you can get. (Participant 10)

Many cited getting a job as a measure of success: “if you can get a job straight away after you graduate that means you are a very successful student” (Participant 10). Fluent English was a key factor to be successful for many and there was a suggestion by one that it was a waste if you did not graduate with strong language skills: “Yeah, if you are good in English otherwise it’s like doing nothing” (Participant 14). One expressed success as achieving all your goals: “I would say if international student who came here with all the
dreams or all the things which he really wanted to do like in the sense of study, learning English or job prospectives, all that” (Participant 34).

Some students had other definitions of success. One emphasised extensive extracurricular experience, evidencing the role of self-efficacy and agency as noted in the literature:

A successful student for me means you have a good academy performance and also extra curricula experience. And if you want to do, if you want to do good in activity, academy, you have to good English will save you a lot of time. And also if you want to like take a leader position in no matter clubs or other student association if your English is not good you have rare opportunity to take that no matter the leadership position. (Participant 7)

Several students in different focus groups described success as being able to assimilate and integrate into society to such an extent that they were not identifiable as an international student:

I think maybe an international student coming out of their degree that doesn’t actually necessarily define themself as an international student anymore, just rather a student, become acclimatised to the, your environment that you’re in. (Participant 34)

Exactly, exactly, rather than constantly segregating yourself mentally from the “natives”, you’ve just become part of it. (Participant 37)

Others felt that achieving permanent residence (PR) was an indication of success: “When they get PR and they get a high level in IELTS, I think they’re successful already” (Participant 29).

On the whole, advanced language skills were generally viewed as a key indicator of success along with good grades, which matches the views of
other stakeholders (Arkoudis, et al., 2009; BCA, 2011; Blackmore et al., Rahimi, 2010-2012; Hawthorne & To, 2014; Robertson, 2011). Success might be evidenced by achieving personal goals such as obtaining a good job, PR status, or by integrating into the local society, a view that is consistent with the literature on motivation noted in section 3.9.2.

### 4.2 Data-driven themes

The second set of themes was data-driven; that is, they were derived inductively from participant responses rather than being introduced by the interviewer (Miles & Huberman, 1994). The comments were aggregated into four overarching themes, and the number of comments for each is tabulated below.

Table 4.3

<table>
<thead>
<tr>
<th>Topic</th>
<th>Number of instances</th>
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</thead>
<tbody>
<tr>
<td>Linguistic matters</td>
<td>264</td>
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<tr>
<td>Motivation</td>
<td>109</td>
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<tr>
<td>Staff support and feedback on AELP</td>
<td>55</td>
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<tr>
<td>Troubles talk and interpersonal experiences</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

#### 4.2.1 Linguistic matters

This theme was a broad category related to the linguistic matters that students identified. The four macrolinguistic skills (listening, reading, writing, speaking) were referred to by participants, along with other rule-governed or discrete aspects of language including pronunciation/speed of delivery, vocabulary, grammar/form/accuracy, and spelling. There were also a limited number of comments related to genre, including ways of organising and
structuring text, rhetorical patterns and logic. The number of comments within this theme is noted in the table:

Table 4.4

*Tabulated Topics and Instances of Linguistic Matters*

<table>
<thead>
<tr>
<th>Topic &amp; subtopic</th>
<th>Number of instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro skills</td>
<td></td>
</tr>
<tr>
<td>listening+pronunciation</td>
<td>28+31</td>
</tr>
<tr>
<td>speaking</td>
<td>35</td>
</tr>
<tr>
<td>writing</td>
<td>34</td>
</tr>
<tr>
<td>reading</td>
<td>15</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>44</td>
</tr>
<tr>
<td>Colloquial/everyday language</td>
<td>25</td>
</tr>
<tr>
<td>Grammar/form/accuracy</td>
<td>36</td>
</tr>
<tr>
<td>Genre, logic and rhetorical patterns</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>264</td>
</tr>
</tbody>
</table>

*The four macro skills*

Comments in relation to each of the four macro skills (speaking, writing, listening, reading) were common; most were in relation to speaking and writing and fewest in relation to reading. In Lee’s (2015) study, macro skills and the subcomponents of lexis and grammar were also used by participants to describe ELP. It is hardly surprising that students attempted to describe the language in terms that were familiar to them, and which may have been highlighted in their language learning prior to the university setting. Language proficiency tests often test these skills discretely, for example, and language school courses and text books often segment by skill.

Listening and the related matters of understanding pronunciation and speed of delivery were commonly cited, particularly early in their sojourn: “Maybe for the listening not good in, but if we do our essay maybe that’s fine”
(Participant 26). This caused concern in relation to understanding course content, requiring students to listen to the lecture recording:

The first time when I went to the lecture I don’t understand even a word what the lecturer says. I have to listen to the Echo…so I was so nervous and at that time. (Participant 10)

However, this difficulty seemed to be overcome relatively quickly: “The accent was a bit hard in the first few months to catch up” (Participant 23) and the improvement was perceived as a result of repeated exposure:

I did sort of struggle with the accent and catching up a little bit, and then it took me a while, but coming to uni then, again, you meet people from different backgrounds so you’re kind of exposed to speak English the whole time. (Participant 36)

The challenge with accents was exacerbated for the students in relation to academics who were themselves EAL speakers, particularly those from the subcontinent, who were perceived to have a strong accent: “Like we have a tutor from Sri Lanka. So it’s hard for us to understand it” (Participant 26). In addition to new terminology, this caused some issues:

I did sort of struggle because some of the lecturers, like they all come from different backgrounds and at times, like the accents were different. So like, you know, switching around between lectures you have to like listen to your lecture from Asian background or then somebody who’s a native English speaker, and they just spoke too quickly and then it was, you know, hard to follow with the technical terms at times (Participant 36).

…My problem was not with me personally, it was with the teachers that you could tell that English was probably a second language for them. So I found it a bit difficult to follow at times. (Participant 32)
As in Rochecouste et al. (2010), participants cited challenges with a variety of accents but commented that they became accustomed to them over time. Students also mentioned challenges in understanding domestic students: “In some tutorials they have the group discuss and you need to hear what the local student said and sometimes their speed is very fast and for our international students it is very hard” (Participant 25), similar to Briguglio and Smith (2012).

Listening outside of the university environment was perceived to cause particular issues, contrasting with the clarity generally experienced in the university setting:

One thing that is harder sometimes outside university is to understand the people. Because they are domestic Australians, they are talking really fast and then sometimes they are [demonstrates muffled sound with hand over mouth] and you are okay? And then you are already smiling, yeah. But in the lecture all the tutors are speaking really clearly. (Participant 27)

As well as issues with understanding others, comments were made in relation to being understood, emphasising the two-way nature of interaction. Students’ own pronunciation sometimes caused perceived issues for domestic Australians (see section 4.2.4 below), also noted by Haugh (2015; in press).

After initial issues experienced with listening, the productive skills were generally seen as the most challenging. This is hardly surprising as it is predominantly through the productive skills of writing and speaking that students are assessed in the university context. These perceived challenges are consistent with the findings in the literature (Burns, 1991; Knoch et al., 2015; Pantelides, 1999). Speaking caused concern for some:
I’m more comfortable in writing. So like I feel I have no problem with that but speaking and listening because I didn’t really have any practice before I came to Australia so I found it hard, yeah. I found it’s very difficult for me like in both academic and casual conversation. (Participant 15)

Speaking was perceived to have less value than other skills in the university setting, thus sending the implied message to students that it was not as necessary to develop it. AELP was seen as more focused on reading and writing than listening and speaking: “Yeah like more likely listening and speaking in our daily life and academic is more likely reading and writing” (Participant 6). As a result, students were of the view that it was possible not to improve their speaking ability: “I think we can improve a lot of our English on reading and writing but it depends on person that’s improved speaking because yeah. Even if I don’t speak English, never improve” (Participant 6). Many respondents commented that their speaking had not improved while others felt that their writing still caused significant challenges for them: “to speak it’s pretty easy but writing it’s a lot more difficult. You translate it or, so it’s a lot harder to write assignments” (Participant 18). A mid-degree student noted “I’m a bit worried about my speaking because I haven’t practised it enough, I think, but listening is definitely better” (Participant 35). Similarly, another student noted improvements in his listening but not for the productive skills: “I think I understand more than 80% now. So I think my listening improved, but speaking or writing is still at the same level” (Participant 33). Similar to Knoch et al.’s findings (2015), one student felt that being forced to write more would help improve their written abilities:

I think if they forced us to write more essays. I don’t know, if we had to submit an essay every week that would be good. Without marking, just, we have to submit it otherwise we will not get a mark at the end. But, just a small essay, about 100 words, any topic, just, and we say okay, we have to do it and we get better. (Participant 30)
Fewer comments were made in relation to reading than the other macro skills and there was a general confidence in the reading skill: “I think for me understanding the lecture and reading the material is fine. I think I can understand almost 90% of it” (Participant 7). Issues with reading were identified in terms of the extra time required to read and process content, and in relation to vocabulary: “If like an article that I have to read, I have to take longer than a normal student” (Participant 5). In some cases, participants identified challenges with understanding texts but were unable to identify the issue of extracting meaning at the discourse level: “I understand all the vocabulary, all the words, but when they’re coming together I don’t know what they say” (Participant 29). This is a particularly telling comment.

**Vocabulary, colloquial and everyday language**

As already mentioned, lexical differences were noted by participants as the most obvious difference between AELP and the ELP in other contexts of use: “To me the difference between academic and daily life English is the vocabulary” (Participant 10). This is consistent with the literature related to school age children in particular (Anstrom et al., 2010). One participant stated: “it depends on your subject, it is more specific, more terminology and the whole vocabulary will be specific around this topic” (Participant 35). Another recognised that this was because “there’s some words that only exist in certain circles and certain industries” (Participant 37). Discipline-specific vocabulary was described as “professional terms and professional way to describe things - it’s more objective rather than subjective and more formal” (Participant 13). The terms were problematic to understand because of their discipline-specific nature: “There’s certain words that you’d come across in only one very minute scenario which wouldn’t be on an English proficiency test” (Participant 37). Students towards the end of the degree, however, felt that they become accustomed to this new terminology over time:
I think every job has their own words - like specialised words, professional words that they use - so when you study that area for two or three years, they get used to it. I got used to it Nursing eventually. (Participant 12)

Many agreed that “in academic English the biggest problem is the vocabulary” (Participant 27). The same participant went on to describe the difficulties:

So for me it’s only the vocabulary, so I always understand the sentences, but then there is one word and it is a key word and you don’t know it in the vocabulary, and that’s then the problem. (Participant 27)

Several suggested that they needed support in the area of lexical development: “So for international students I think maybe teacher need to put some, like vocabulary and main points, maybe in the internet for international students” (Participant 25) or for tasks to be set in relation to extending their lexical resource in the discipline: “when there would be a course you have to learn every week 100 academic words and then you have to learn them, then you would do it” (Participant 27). A lack of an appropriate resource for looking up terms related to the subject area was also raised: “You want to look it in the dictionary and you can’t find the word which is a good expression of that because it’s a law word” (Participant 27).

Similar to the BICS/CALP division noted by Cummins (1984) and the everyday/academic distinction in the higher education conceptual models (Harper et al., 2011; Mahboob, 2014; Murray, 2010; O’Loughlin & Arkoudis, 2012), academic and everyday contexts of use were perceived to be different by participants. Some had been made aware of this by language teachers: “the teacher also told us you can’t use this word. It’s not academic word. It’s a spoken English” (Participant 26). There were numerous comments regarding the amount of slang and colloquialisms used by Australians, which caused them difficulty: “like ‘woopwoop’, I don’t know what’s that and then told me
that’s the distant area, the remote area. I don’t know that, to me it’s just
different and I don’t know too much Aussie slang” (Participant 13). There
was also awareness that different varieties of English use different terms:
“Australian’s have like a lot of sayings which I have no idea about, but if
go to America and they use differently” (Participant 34).

Grammar/form/accuracy

Interestingly, grammar and form were not referred to by participants when
asked to define AELP or the differences in ELP in different contexts.
Grammatical accuracy seemed much further down the list of priorities to
students than other aspects of language, and was used as a rather vague and
‘catch all’ term to describe language accuracy. When asked whether
academics cared about their standard of language, some participants made
comments such as “I think they care your grammar, spelling, yeah”
(Participant 4). Others felt that grammar and sentence level accuracy was
unimportant and not a major focus of academics: “Not completely ignore, but
they know they’re international so they take that into account” (Participant
13). Some disagreed and were aware that language was sometimes included
as a criterion in assessment “Because for some, like assignment criteria there
is a section which is language, grammar” (Participant 23). Most were given
the explicit message that their grammar was not a focus, though a few cases
required accuracy: “there’s a subject called Auditing so it requires very
precise on grammars and everything because it’s about audit stuff so it has to
be precise” (Participant 15). On the whole, students seemed aware that
proficiency is more than sentence level accuracy and form, which matches the
theoretical models in SLA (Canale, 1984; Canale & Swain, 1980; Bachman
1990). However, although their focus had moved beyond the sentence, scant
mention was made of higher order discourse features such as coherence,
cohesion, or matters at the text level, as evidenced in the next theme.
Genre, logic and rhetorical patterns

Genre or the notion of an explicit structure/organisation to texts was rarely commented on by respondents. The limited responses related to this concept came from only two focus groups. It has been included as a theme because it is central in the literature on disciplinary differences (Duff, 2010; Hyland, 2002, 2011; Lea & Street 1998, 2000, 2006) and a key component in theories of ELP (Canale, 1984; Canale & Swain, 1980; Bachman, 1990), yet was noticeably absent from the student conceptualisations on the whole.

Mid-degree students showed some awareness of genre and ‘rules’: “for me it’s more difficult to write an essay because it’s more about the structure, like you said, how to write an essay. We have many assignments and we have to respect the rules in Australia” (Participant 31). Another commented that:

English is my third language, so I had a good background with English but the thing is I didn’t know how to write, like you know, institution structured way or in an academic way. (Participant 34)

Students in one of the early focus group offered comments regarding the different structures of text types: “Writing is more difficult, the academic English, the writing has, you should write the reports, summary essay and even the kinds of, it needs different requirements. And also I can’t understand how to write. So for an example a report. It’s different from an essay” (Participant 25). They also identified that they might organise information differently in texts in their L1: “I think different things have different style, need to ask to follow, is different to our first language” (Participant 25). This was linked to different ways of thinking:

I think the more important is about the structure. Because the logical in English is different than in Chinese. It’s so different and for example you may think you could say the solution as a first sentence. But in Chinese it’s
the end sentence. That what we need, we may something that is not very important at the beginning and the end, we have the solution. But in English it is different. Because the logic is different. (Participant 29)

When asked by the interviewer how or why they had come to this conclusion, they commented that they had learnt it in their recent pre-sessional Direct Entry Program (DEP); it was not something that had been made apparent to them in the University itself. It was of interest that so few students mentioned the genres required within their degree, suggesting that this is not explicit, or front of mind.

4.2.2 Motivation

This theme reports on the theme of motivation and what or who motivates students to develop AELP during university studies. It also includes comments related to lack of motivation. This theme received 109 comments, more than any other individual theme or subtheme, even though the term ‘motivation’ was not introduced by the interviewer. Given the impact of motivation (and its related concepts) noted in the literature, it is perhaps unsurprising.

Students reported being motivated to improve their ELP in order to participate more effectively in their studies and daily life:

Sometime I feel like I’m shy to talk English with some Aussie people like they can’t understand me so I have embarrassment. If you has a good English you like more can feel to participate in the more activities so you can it easy for your life. (Participant 24)

As previously noted, students were overwhelmingly of the view that ELP improvement depends on motivation stemming from the individual: “You need to have some motivation. You come here to speak English not your own language” (Participant 21). One participant even used the term “intrinsic
motivation” (Participant 13). There was some suggestion that effort or resilience was required to improve language skills: “Just be out there, be ready to face anything and everything” (Participant 23). One admitted that the “First year of Law, oh it’s so hard. Everything is so hard but I didn’t give up” (Participant 8). Another felt motivated by the need to communicate in the local community; “the community you’re surrounded with, sometime that kind of pushes you to reach the barrier where you just want to go more further” (Participant 34). Only one felt motivated by teaching staff: “sometime you hear things from lecturer who kind of motivates you to get into that side” (Participant 36). It was suggested that not all students had such motivation: “For some students they don’t want to learn and don’t bother but for some, especially for me, I do want to learn” (Participant 13). Some commented that a desire to improve their ELP “depends on the personal goals of the person, it depends what they want” (Participant 34).

Peers were described as potentially having either a positive or negative influence, motivating students to learn or encouraging them to take shortcuts: “If you make the friends it’s not, don’t like to study and he will didn’t go to the class, miss all the lecturer, miss all the tutorial, didn’t write assignment and maybe you will follow him” (Participant 22). This is due to in part to the freedom that many are enjoying for the first time away from home and their families: “we didn’t have the parents to control our study life. Just yourself to control yourself. So the friend is mostly important” (Participant 23). Others were inspired by their peers: “When I have, for example, my group and there are so many natives, I feel a bit disadvantaged” (Participant 35), and this motivated him to improve. Students were sometimes affected by the linguistic abilities of those around them:

Sometimes there is a person who is sitting next to you is, yeah, you’re like if someone is doing very good with the grades and you sort of want to get in touch with them and trying to improve it yourself as well in order to achieve a good score, that kind of influence. (Participant 34)
…and then sometimes you feel, “Ah, my English is so much better than some of the other guys.” And then yeah, that kind of motivates you to like learn more. (Participant 36)

Another felt inspired by peers who had already graduated:

Oh, not my colleagues to be honest but my friends who graduate already and have got a job in Queensland Health, got IELTS seven on each band and got a job in Queensland by the fact, it really inspires me to be honest. (Participant 12)

Friends also provide information (correctly or otherwise) regarding future goals:

Yeah because I learned from one of my friends like if you want to apply for work they give you a test, English test, then you have to learn, understand and know speak English, before you get the job. (Participant 4)

Students were motivated most of all by their future goals and the perceived opportunities that strong ELP might provide. For many, that was a good job, perhaps in a multinational firm: “I think companies like Samsung and LG hire PhD graduate or master’s graduate with good English skills and the report their work in English so I think English even in my country is important as well” (Participant 12). The importance of developed English was more evident to them for the world of work than university, as well as the penalty for having poor language skills: “But at workplace you might be, be unemployed [laughing] if you do the wrong thing” (Participant 19). The perceived increased consequences and expectations in the workplace have already been mentioned.
Many were aware of the English language proficiency test requirements to meet migration or professional registration thresholds to remain in Australia beyond graduation and were already working towards that goal:

Yeah so, so like if you want to stay here in Australia and let’s say I’m studying accounting, so if you want to get our degree assessed they require accounting students to have a higher degree of English. So you have to get in IELTS enough, you’ll have to get eight points and above. So some people take in mind and they just work hard behind that. (Participant 3)

Mirroring the literature, the theme of motivation was a strong one, with students admitting the need for effort and resilience in order to improve ELP, reminiscent of Bridgeman et al.’s ‘grit’ (2015), and often citing the importance of future goals.

4.2.3 Staff support/feedback on AELP

This theme considers the unsolicited comments made by students with regard to the support and feedback offered in relation to AELP, either content academics or English language support service staff. Fifty-five comments were made in relation to this topic.

Most students readily acknowledged the support provided to them: “I can find Griffith is more supportive and they try to support the student rather than dispel them” (Participant 12). The dominant view was that “the lecture or course convenor that really nice to international student” (Participant 13). Where students are struggling, staff were perceived to accommodate and give the benefit of the doubt where possible:

When I was in my first year there was one subject where I had to do a case summary and my expression in English is very bad I think. Very bad that I’ve got only half, like 50%, and the lecturer just come to me and said can we meet you after the lectures and stuff. So I went to meet her and then can
you please explain what are you trying to say over here, this part. Okay so I just tried my best to explain to her this is what I understand what I get from the case. So she increased my marks. (Participant 8)

Many students commented that their tutors spoke slowly and clearly and were easy to understand: “And in the lecture all the tutors are speaking really clearly. Even, I don’t know if they are doing that for us or if it’s only the academic English so it’s more clearly” (Participant 27).

They noted feedback from content academics, though not usually in relation to language: “When you have a question they answer but yeah they don’t actually teach us English” (Participant 3). In fact, there were several comments suggesting that academics were soft on the linguistic accuracy of EAL internationals: “Sometimes they give a free pass to international students especially in terms of grammar” (Participant 13). For some this was not necessarily viewed as a positive: “However, I believe if the lecturer or tutor care more about my English, become more supportive, my quality of study would become much better. But at the moment I believe they don’t care about my English” (Participant 10). Mid-degree students were firmly of the view that staff just expected a level of ELP in addition to other competences and “just expect you to know” (Participant 36).

Many students commented on the support provided by free concurrent language support services such as EnglishHELP, which many of them saw as vital: “All the English teachers at Griffith make me feel I have support. I think they are so supportive. Even I think English teachers they don’t have the specific knowledge in, like technical knowledge but they have me feel like supportive” (Participant 10). Such services are highly valued by students: “I was struggling at the beginning but by the help by the Griffith University team it has got easier” (Participant 12). Some perceptive students noted that language specialists were not experts in the content, also commenting that
content academics were not well-placed to support academic language matters:

Yeah, because if you go to the EnglishHELP or stuff, those teachers there, they don’t have the professional knowledge. They don’t know the course that you – what’s your demand in that course, they just fix up your grammar but the content’s wrong. On the other hand, if you go to those lecturers you just got content but the grammar is wrong or not that good. So I think for any kind of lecturer they should take care of international’s more you know. (Participant 13)

The general view was that students felt supported by the institution but that AELP is not a key focus of content academics, which in some cases might preclude the desire for students to improve. Such comments have been noted elsewhere (Knoch et al., 2015). The views about university academic staff, however, contrasted with the negative experiences noted in other studies (e.g. Haugh, 2015).

4.2.4 Troubles talk and interpersonal experiences

During the focus groups, students regularly related personal anecdotes of linguistic experiences both on- and off-campus. This ‘troubles talk’ (Haugh, in press), where the focus is on the teller and their experiences, offers a rich insight into the lived experiences of an EAL international student and how they might be affected on a personal level. There is surprisingly little focus on it in the literature (Haugh, 2015; in press; Humphreys et al., 2012). Many of the stories that participants offered were in relation to a critical interpersonal experience or challenging situation early in their time in Australia, thereby adding nuance to student conceptualisations. Interestingly, these were predominantly off-campus everyday issues, often in relation to being understood by local ‘native speakers’ (consistent with Woodrow, 2006), in the community and with customer service staff. One student related a conversation with a customer service operator who did not understand her
pronunciation, which both surprised and embarrassed her: “For example, when I call my car insurance and they ask me my car number I say LPV and they don’t understand. They said please give me example like C for Cat, or it is, I think, how bad my pronunciation, is it? I’m so shocked” (Participant 29). Another called his bank for a simple matter but also had difficulty being understood: “So I spoke to ANZ customer service and I didn’t understand a word ... And I just wanted to say my credit card didn’t arrive, but I think they weren’t able to understand me” (Participant 30). A third asked for directions from a local but was not understood: “He asked me twice, thrice he didn’t understand, so it was like go and catch a cab if you go where… I won’t forget that” (Participant 20).

Another mentioned the need to call his car insurer and the challenge he had in understanding the person on the other end of the phone, particularly the sociocultural nature of the interaction and the vocabulary:

One month ago my car was stolen. And I had to call the insurance company. And it was hard for me to understand the whole information from the customer service. And they used a special vocabulary, they use special words and they speak so quickly and sometimes hard for me to understand what that means, could you explain it? (Participant 25)

Vocabulary also caused issues for practical matters like shopping for food: “The first time I went to the supermarket I don’t know much of this product, it’s really, I use my phone dictionary to search for what I need [laughing]” (Participant 2).

A few tales were related to experiences during university studies.

When I did my assignments and I wanted somebody to help me with my grammar because I know that that’s still my problem so I went to one of my lecturer to let him read my assignment and then he said oh, he don’t
understand a thing. That was the first time that I failed my assignment yeah, that was the first time and then after that I tried to improve my English so it’s getting better and better. (Participant 8)

One student who undertook a work placement arranged by the University articulated the frustration experienced by international students who perceive themselves to be high achievers, yet who are perceived differently by employers. In this example, he was not treated as an equal due to his perceived linguistic and sociopragmatic ability, as noted also by Gribble (2014). This emphasised the need for good English beyond graduation for the work context:

Yeah the story I just mentioned in the Deloittes in practicum, that’s really difficult, really challenging. And I have to say that it’s really not that pleasant experience for me because I’m the only international in the whole course which has got 23 people. It’s really challenging and then the team mates have no trust in me and because of the communication style it’s not that smooth because all the – other three students they are native speakers, one from Canada one from New South Wales, another from Switzerland. They all speak English really well and they’re afraid to give important tasks to me. Not because of my ability but because of the communication. It really hurts me but in the end I stuck it and just finish it but you know, it basically means that if you want to work in Australian organisation that’s totally different from the Griffith or the University environment and you really really have to speak really really well. (Participant 13)

Two healthcare students also related issues during practicums with facilitators who had an unconscious bias against them as international students (see also Gribble, 2015), assuming their intercultural communication skills would be poor, even though the students had no such issues with the patients:
I think my English is fine to be honest but when you actually meet these kind of not friendly people you feel like, oh my god, are you bullying me? Not bullying you but I feel like somewhat like shrinked and my first prac at South Bank and felt like she was kind of attacking me. Not attacking me but kind of watching me because I was the only international student. She said you are struggling with your communication. (Participant 12)

Others related positive tales about how they felt their English had improved during their time in Australia, allowing increased flexibility with illocutionary meaning:

Three weeks ago even I have an argument in English. I felt – at that time I got angry with my flat mate but then a few hours later I felt so funny. I thought wow, now I can have an argument in English. I haven’t ever done that before. (Participant 10)

Some cited friends with excellent English, particularly students who had studied at high school in Australia and were perceived as fluent: “If I compare myself with my friend, oh what a difference” (Participant 8). Another mentioned a fellow student who got a high IELTS score at graduation. Such friends were influential and motivated them to strive for better language outcomes themselves.

Most of the talk offered related to negative linguistic experiences outside of the study environment in the early stages of their degree, often as a result of not understanding or not being understood in relation to day-to-day matters. Negative experiences such as these are corroborated in Haugh (2015; in press), who reports the impact on students personally, relationally and communally. From the student perspective, the incidents position them as linguistically deficient, which were perceived to be unexpected and even unwarranted. There seemed to be fewer issues related to their studies, because more accommodation and understanding were perceived in the university
Students are clearly personally affected by such experiences, and a hierarchy of needs in the early months in Australia was evident.

4.3 Differences by variable

Each focus group comprised students with varying language backgrounds, disciplines and entry pathways. The groups differed by stage of degree: early, mid, or end. The considerable consensus in response to many of the topics has been noted so we reflect here on any differences identifiable by these variables to address RQ 1.2.

4.3.1 First language (L1)

Differences in views of participants by L1 were present but not strong perhaps as each focus group was too small for patterns to emerge. However, those from the outer circle (e.g. India) seemed linguistically more confident than those from the expanding circle, largely because they had studied in EMI contexts: “I thought I had adequate English skills to start off with but yeah I’m definitely improving my English day by day” (Participants 20). The same respondent from India expressed surprise at some of the discussion related to struggling with ELP: “I have a question. How can you get to Australia without knowing English? How do you get there?” Students from the Expanding Circle, on the other hand, considered lower ELP to be expected: “Because it’s not my first language so obviously it’s like I have to take a long time to learn stuff (Participant 5). Some commented on how English had been taught in their country with a focus on grammatical accuracy, for example in Korea.

4.3.2 Entry pathway

Students had entered the University via a variety of pathways. Those who had entered via high school, a diploma undertaken in Australia, or a pre-sessional academic DEP were generally comfortable with the demands made of them at
university. Such prior learning experiences in an EMI context had prepared them for the transition to university: “I did a Year 12 here so it’s like a [pathway partner] here but I did it in a UWA Foundation Program so yeah I think it helps me a lot in understanding” (Participant 17). In retrospect, students recognised the usefulness of the content of such courses:

Like for example in my first year in [pathway partner] we just had that basic research. Like introduction to marketing, we had a course we had to, we had a research, we had a presentation, so now this year we’ll be having university service reflection task where we go, we meet people, we have appointments, where we can express our problems, we can improve our English. (Participant 1)

The following exchange exemplifies the perceived importance of such transition courses, contrasting the experience of those who came directly to the University having taken a language proficiency test offshore:

P8
In [Pathway Partner] we have to study one course. It’s um...
P13 Academic Writing
P8 Yeah, academic, professional skills and that one helps a lot.
I So some of you did a Diploma before, so maybe it wasn’t such a shock when you came to Griffith?
P13 Smooths things a little bit better.
I It was smoother for you. So what about you, Thi? You came immediately from Vietnam directly to Griffith. Was it a surprise - the English that you had to use at University?
P10 Yeah, it was a big surprise. The first time when I went to the lecture I don’t understand even a word what the lecturer says. I have to listen to the Echo [lecture recording] but however, even so I was so nervous and at that time I didn’t think I could finish the assignment.

---

21 *P* represents the participant corresponding to Table 3.1; *I* represents the interviewer
with 1,000 words in the 5901 course. Luckily I got help from EnglishHELP so consultation time. That was so helpful.

It has already been noted that students who had entered via the University’s own pre-sessional academic language preparation program were the only respondents to explicitly mention genre and text organisation. Similarly, they were the small cohort who cited critical thinking:

- You have to think critically and also you have to apply in your English how to make it logical, how to make it sense in English when you write your assignment. (Participant 12)

- Academic English need critical thinking. My teacher and my tutor and lecturers always taught me you should have critical thinking. But writing, always the critical. (Participant 26)

They were also aware that there was less explicit language support once they moved into the University proper:

- When in study in DEP if we miss some problems we can ask for help from our tutors. But when we are studying in university, nobody help us. We can send email to the teachers, the tutors and get some help from EnglishHELP. (Participant 29)

It would appear that such preparatory courses are, retrospectively at least, highly valued by students. Students coming directly from offshore often reported greater initial struggles. This seems at odds with the view that pathway students are more at risk (Oliver, Vanderford, et al., 2012) and instead evidences that such courses provide useful transitions for EAL students.
4.3.3 Discipline

Differences in views by discipline were minimal. Most students were aware of disciplinary differences, though there was particular awareness by Health and Law students, perhaps because the vocabulary is so evidently different from other contexts of use. Engineering and IT students reported that ELP was less vital on the whole for their discipline than for more language-based subjects, though they realised that it would be useful for the world of work even if not a critical skill to complete their degree. Disciplinary differences are a major theme in the literature and it was therefore surprising that this did not emerge more evidently but may be due to the fact that students are only aware of their own field.

4.3.4 Stage of degree

Students made remarkably similar comments regardless of the stage of their degree. However, students in the middle or towards the end of their degree were more cognisant of the need for good English for the world of work and/or their other future goals, while those early in their degrees were understandably less focussed on graduation and beyond.

4.4 Interim discussion

This strand used focus groups to explore student conceptualisations of AELP. By quoting extensively, the student voice was foregrounded, positioning the students as the ‘subject’ and ‘agent’, something which is largely missing from the literature to date. Their views were generally consistent with research that does exist, though some noteworthy differences also emerged, especially in relation to motivation to improve and acceptance of responsibility to do so.

As noted in the Methodology chapter, the findings from the focus group study motivated the development of the survey instrument for the subsequent part of the study, which further investigates the main themes and how widely views are held across a larger cohort. Five substantive sections explore the
topics of interest from the focus group data in the survey: standards of English, challenges with academic English, describing academic English, improving English at university and the importance of English. Of particular relevance was whether the larger cohort held similarly strong views on motivation and the responsibility to improve their AELP during their studies. Whether students perceived AELP to be a critical factor for academic or future success was another area of interest, and where any perceived challenges lay.

Given that they are closely inter-linked, the findings of student conceptualisations of AELP from the focus groups and the survey are integrated and discussed in full at the end of the following chapter.
Chapter 5: Part 2: Survey findings

This chapter presents the findings of Part 2: survey, which further explores student conceptualisations in order to answer RQ1.1 and 1.2:

1.1 How do undergraduate international EAL students conceptualise ELP within higher education?
1.2. Is there any systematic variability in conceptualisations correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or stage of degree?

This is shown in the following figure:

![Conceptualisations + Outcomes](image)

*Figure 5.1. Research design Part 2*

The findings are divided into two parts. The first part reports on the conceptualisations by the five sections of the survey instrument: Standards of English, Challenges with Academic English, Describing Academic English, Improving English at University, and the Importance of English. The distribution and intensity of response is evidenced by the percentages of agreement to each item. In the second part, exploratory factor analysis is undertaken to create scales based on the underlying themes. These scales are used to subsequently investigate differences in perceptions by the key variables between the participants: gender, academic discipline, entry
pathway, stage of degree and post-graduation plans. The findings are compared with the focus group responses from the previous chapter to provide a composite view of conceptualisations held by students on these topics solicited by the two methods.

5.1 Perceptions by topic

5.1.1 Standards of English

The graph below summarises the frequency and intensity of the responses to the items in the Standards of English section, from “I don’t know” on the left followed by each of the responses on the Likert scale from strongly disagree to strongly agree on the right.

*Figure 5.2. Summary of the Standards of English topic in percentages*

It can be seen that there was strong consensus among survey respondents that good AELP was needed to get a good grade in University courses. Only 8% disagreed or strongly disagreed, while over 50% strongly agreed. Interestingly, however, the views on the possibility of just passing a course with poor English was less clear, with 50% disagreeing, 28% agreeing and a further 20% unsure. This indicates that while students perceive a good grade to require good English, there were mixed views on the level of English required to gain the minimum pass grade. It confirmed the comments from the
focus groups that good AELP was essential for a good grade and that there is a gap in the competence required to do well as opposed to just passing.

Similar to the focus group responses, the consensus view among survey respondents was that AELP improves as a result of studying in an EMI context. Over 80% believed that their academic English would improve during their degree. As one student said in the open response section: “I expect to be better and better in my English skills during my degree; when we are in the last semesters we need to have a excellent academic English skills” [Female, Portuguese speaker, first semester, Health student].

There was also strong agreement that students have to make an effort for this development to occur with 87% agreeing or strongly agreeing with this statement. This finding differed from the focus groups where students had suggested that language acquisition took care of itself. A few survey respondents also held this latter view: “During study, English capabilities will improve naturally because it forces us to use it anyway” [Male, Malay, final semester, Science/Technology student]. Respondents generally agreed that academic teaching staff expected their language to improve during their studies: over 70% agreed or strongly agreed, and this was consistent with the focus group comments.

A key question of interest was whether, retrospectively, students felt their English had been at a high enough standard to commence their undergraduate degrees. Almost 50% believed that it had not been at a high enough standard, though 20% neither agreed nor disagreed and just over 30% felt it was at an adequate standard. The response is not as strong as in the focus group data, though half of the respondents were of view that their AELP was not at an optimum level at the commencement of their degree. A more dampened response from survey respondents on this topic is perhaps to be expected given that they are more briefly engaged with the topic than focus group

---

22 The profile of respondents who provided optional qualitative comments is given in brackets.
participants. However, there were some strong views expressed in the open text sections: one respondent noted: “My first two semesters were absolutely screwed due to the lack of my English skills” [Male, Chinese, final semester, Business student]. Another commented that the entry levels should be raised to ensure stronger commencing AELP:

I personally think that the standards of English should be raised from entry levels. It has been a common issue in undergrad level that there is a large number of international student, particularly Asian students, struggle to communicate in English verbally. This issue affects their academic performances as it does not allow them to efficiently communicate in groups, classes and elsewhere [Female, Vietnamese, not first or final semester, Business student].

Another suggested that the language proficiency test they had taken had not facilitated the transition to university, echoing a comment from the focus groups:

I think IELTS is useless because the test itself and the real life conversations are really different. For example, if you live in Australia, the native accent strongly impact the listening quality, so IELTS is making the early stages very difficult to come to Australia [Male, Malay, final semester, Science/Technology student].

The view that their language was not at desirable levels at the outset was substantiated by the response to another item in the set (“I wish my academic English had been stronger at the start of my degree”), to which two thirds agreed.

Students also held the view that their AELP had improved since commencement, with around 78% agreeing or strongly agreeing with this statement. This view was corroborated in the open text responses:
When i first started uni, it was really hard to catch up with classes because English is not my first language. However, by the time goes by, i learned how to use the academic English in terms of speaking and writing [Female, Japanese, not first or final semester, Business student].

Another felt she had needed more support in the early years but grew to be more self-sufficient: “The first 2 years I used EnglishHelp but last year I rarely used it for my assignments” [Female, Other language, final semester, Arts/Social Science student].

Only just over half (51.96%) agreed their AELP was currently good enough to graduate, indicating that they wanted or expected further acquisition to occur prior to completing their studies.

5.1.2 Challenges with academic English

This section investigated perceived challenges of AELP that had been identified by the focus group respondents, including the four macro skills (writing, speaking, reading, listening/pronunciation) and vocabulary in the discipline. The figure below summarises the responses on this topic from “I don’t know” (left) through the various degrees of perceived challenge increasing from left to right.

Figure 5.3. Summary of the Challenges with academic English topic in percentages
Like the focus group respondents, over 80% reported some degree of challenge with the writing skill. Over half said writing was quite or very challenging; the most common view was that writing was quite challenging. The open text responses mirrored comments received in the focus groups: “I think writing is the most significant, because in order to write good reports for assignments. Academic English must be accurate and logically flow and easy to read” [Male, Other language, first semester Science/Technology student]. Some reported that issues go beyond the linguistic, noting that “writing academic essay is not just a language challenge, also a cultural understanding” [Female, Chinese, first semester, Business student].

45% reported the speaking skill to be challenging and over 70% indicated some degree of challenge with this macro skill. Open text responses referred to challenges to “speak English in the tutorial such as discussion with peers” [Female, Korean, second semester, Business student], and also stated that “the greatest challenge is speaking with local people about specific topics” [Female, German, first semester, Health student]. As with the focus group respondents, the productive skills were perceived to be the most challenging – most likely because this is how students are assessed in the higher education context. Challenges were also perceived with non-academic contexts and topics.

Three items on the survey investigated views about challenges of understanding the pronunciation of others. This had been noted as a particular issue by focus group participants. Similar to the focus groups, the pronunciation of academic teaching staff was not perceived as being particularly challenging; over 50% indicated no real challenge, though 30% reported it as challenging or very challenging. However, open text responses in relation to non-native speaker teaching staff was not as positive, and mirrored the comments made by focus group participants: “Understanding lecturers or tutors is only difficult when they are of non-Australian origin and have very poor English” [Female, Norwegian, final semester,
Science/Technology student]. The pronunciation of domestic students was generally seen as more challenging than that of teaching staff, consistent with the focus group data: 26% found domestic students quite or very challenging to understand and 31% a little challenging, though a further 41% did not find their pronunciation an issue. The pronunciation of local people in everyday life was perceived to be similar in difficulty to that of domestic students: 27% reported finding it quite or very challenging, though 43% did not. Overall, perceptions in relation to the pronunciation of others were similar to the focus group data: local people and domestic students’ pronunciation is not perceived to be as easy to understand as that of academic teaching staff. However, there was a wide range of views for all three groups, which might suggest that perceived difficult is dependent on a range of factors.

In the focus group data, vocabulary was noted as the most obvious difference between AELP and the ELP used in other contexts, and numerous challenges were reported in the survey in relation to its acquisition. The response was dampened in the survey data but still present: around 40% found vocabulary within their degree subject to be challenging or quite challenging and a further 42% found it a little challenging, meaning that over 80% experienced some challenge with discipline-specific vocabulary.

35% perceived reading to be quite or very challenging and two thirds perceived some degree of challenge, though the most common view was that it was only a little challenging. The reading skill had also attracted the fewest comments (by macro skill) in the focus group data. One open text response in the survey noted academic lexis as a challenge and also noted the impact it had on his/her reading ability and speed compared to native speakers:

The biggest issue i think is glossary especially when i need to read the textbook or some additional sources that lecturer provided, there are plenty of words in there i couldnt understand so they can understand what the lecturer actually talking about during the lecture other than sitting here like
"what the hell he/she is talking about?". It makes me have to spend about half an hour or even an hour to read one single page of my textbook depends on the subject, which i believe a native english speaker can do it with 10 minutes [Male Chinese final semester, Business student]

5.1.3 Describing academic English

This section provided respondents with the opportunity to describe academic English by comparing contexts of use identified by focus group participants. The figure below summarises the responses on this topic, showing the degree of difference perceived between AELP in various contexts, ranging from not different at all (on the left) to very different (on the right).

![Figure 5.4. Summary of the Describing academic English topic in percentages](image)

Similar to the focus group findings, there was agreement (over 50%) that AELP differed from English used in everyday life; only 18% perceiving it to be not very different or not different at all. Interestingly, few saw a difference between AELP and the English for professional work after graduation (22%), suggesting that the language used in the discipline is perceived to be relatively similar to that required for professional work. Open text responses supported this view:

In my degree, the professional and academic is not really different at all because we use terms and technical language. While for everyday use I
found that so many people use slang and the type of language is very standard and casual. [Male, Malay, final semester, Science/Technology student]

Academic English is the study of accurate English skills to develop professional speaking, reading, writing and listening skills. This are the most demanding skills in real working areas if students want to employ in companies and large organisations. [Male, Other language, first semester, Science/Technology student]

Like the focus group respondents, survey participants perceived some difference in AELP in their own major and other subjects, although this finding was less apparent in the survey. Only one third reported it as quite or very different from other degree majors, while a further third felt it was a little different. However, they did note a strong difference in the vocabulary of their discipline compared to other disciplines, with almost 50% perceiving it to be quite or very different, although 12% reported that they did not know. Similarly, vocabulary used in other contexts was generally perceived to be different to their own major (over 40%). Vocabulary was mentioned in the open text responses as being specific to the discipline and different from everyday language:

Academic English is an English that more relates to the course taken. Every major has their own vocabulary. [Female, Other language, second semester, Business student]

Vocabulary and terms related to my profession, and the very formal language, which is different from daily English. [Female, Chinese, final semester, Business student]

In terms of writing genres, only around a third reported differences between their subjects and other subjects, and a further third saw them as a little
different and 12% reported that they did not know. This was similar to the focus group comments, where comments on genre or rhetorical patterns within the discipline were noticeably absent, suggesting that such matters are taught and learnt implicitly. Interestingly, however, around 79% perceived a difference or some difference in rhetorical structures in academic writing in English compared to their own L1, suggesting that students can be aware of such differences.

When asked to define AELP, open text responses in the survey suggested that “Academic English is necessary to study at university, to read the lecture materials, to understand the content and to write about different topics” [Female, German, first semester Health student]. It was seen as “the adequate manner to communicate ideas or specialized information in an academic environment” [Male, Spanish speaking final semester, Health student]. AELP was also described as more complex linguistically than everyday English as evidenced in the two following quotations, with one citing the role of nominalisation:

To me academic English is an English skill which use appropriately for study, unlike ordinary English which is for daily life. Academic English contains more specific theories as well as concepts that people are more likely never heard in their daily life. To me in my daily life the thing i need to do is just remember the nouns people might use when talking about something that I don't know how to say in English, but academic English is much more complicated than that. [Male, Chinese, final semester, Business student]

It is difficult to understand as there are lot of nominal clauses used in one sentence. There is a lot of information in each sentence of academic English. [Male, Hindi, first semester, Science/Technology student]
5.1.4 Improving English at university

This section investigated views on responsibilities and motivations for improving English at university. The figure below summarises the responses on this topic from “I don’t know” followed by each of the responses from strongly disagree through to strongly agree.

One of the strongest responses in the survey was the view that students themselves are responsible for improving their language during their degrees, with almost 90% agreeing or strongly agreeing as shown in figure 5.5 above. This strong view about responsibility to improve ELP is consistent with the focus group findings and was corroborated in the open text responses. As one respondent summarised it:

I think international students should be responsible of their English. If you wanna go overseas to study, you should know their language very well. So you don't end up blaming lecturers for giving you low marks because of your poor English or whatever. Universities shouldn't be responsible for improving international students languages because we decided to come to this country and study in English. [Male, Arabic, third semester, Business student]
Sometimes this responsibility was related to success in their studies: “Students should be responsible if they come to an English speaking country to understand the language enough to obtain a degree” [Male, English speaker, final semester Arts/Social Sciences student] and “because if I am not good at it, I'll get low marks in my essay and report” [Female, Chinese, first semester, Business student]. Sometimes it was for professional reasons: “I am responsible to improve my academic English as it influences future patient care” [Female, Chinese, final semester, Health student].

There was also very strong consensus, consistent with the focus group view, that the University had a responsibility to support AELP improvement (78% agreed or strongly agreed). This responsibility was also perceived to reside with individual academic teaching staff: two thirds held the view that academic staff were responsible for helping students to improve, though it is likely that students do not perceive a separation between the institution and the staff who deliver the programs. Some open text responses requested more feedback on their language from teaching staff:

I think that lecturers and tutors should always provide feedback on structuring and phrasing when writing or speaking regardless of the student speaking English as his/her first language. [Female, Norwegian, final semester, Science/Technology student]

In terms of motivation for improving, personal responsibility was reported as very strong. Over 85% of respondents agreed or strongly agreed that motivation to improve their English came mainly from themselves. Almost 80% reported feeling motivated to improve English for their studies, and a similar number were motivated to improve it for their future after graduation. Numerous open text responses emphasised this symbiotic relationship between accepting responsibility to improve and the motivation to do so: “The more I study at university, the more motivated I become to build up knowledge and improve my English skills” [Female, Vietnamese, first
Two thirds reported that peers motivated them to improve their English, while 58% reported feeling motivated by lecturers/tutors:

I think the most important fact is the self-motivation. This is the foundation to improve the academic skills. But the motivation can be improved through lecturers/tutors or through support possibilities (like EnglishHelp) from the University. [Female, German, first semester, Health student]

In summary, strong levels of motivation were reported for improving and taking responsibility for English enhancement, consistent with the focus group findings.

5.1.5 The importance of English

This final set of items investigated views on the importance of English. The responses are summarised in the figure below.

![The Importance of English](image)

Figure 5.6. Summary of the Importance of English topic in percentages

Again there was very clear consensus in the sample that AELP is important for university studies: 96% of students indicated agreement or strong agreement with this statement, and the highest percentage of strongly agree responses in the questionnaire (66%). One respondent added “having a good academic English is fundamental” [Male, Japanese, final semester, Business]
student], while another said: “language is truly the way to enter cultures. Furthermore, it would be a shame when living in a country for a considerably long time and I can't even speak their language” [Female, Vietnamese, first semester, Business student]. Some mentioned that professional knowledge was of equal import to AELP:

> Academic English is important for students to achieve their goals. However, it is not the only thing that we need to do for our degree. For some courses, the professional knowledge is more important. [Female, Chinese, first semester, Arts/Social Sciences student]

Two thirds reported that English would be more important after graduation, though a small number disagreed (8%). This was further corroborated by the response to a related item: 89% agreed or strongly agreed that a high standard of English is important for a good job, and this was consistent with the comments made by focus group respondents. One respondent noted: “I want to have a excellent English skills to be excellent in my degree and to get a excellent job in the future” [Female, Portuguese, first semester, Health student].

In response to the question whether good English is more important than a good GPA, around a third agreed or strongly agreed, though the most common response was to neither agree nor disagree (34%) and a large number disagreed or said they did not know. The inconclusive responses to this item in fact corroborate the responses to a related item in the set; that is, whether a successful international student needs good grades and good English, to which over 85% agreed or strongly agreed. One third also agreed that they could graduate without a high standard of English. Interestingly, when asked to comment on other students, over 60% reported that many students don’t care about their English. They did not admit a lack of interest for themselves, however, with two thirds disagreeing with the statement that they don’t care about their English as long as they pass. It may be that these reportedly
de-motivated students did not respond to the survey but those who did respond generally stated that AELP was important to them.

5.2 Perceptions by the key variables

5.2.1 Exploratory factor analysis

Having investigated the views by the five topics, we now explore the relationship of perceptions between the key variables. Before doing so, the 39 items in the survey were subjected to principal components analysis (PCA) to form coherent and validated scales based on the underlying latent structure for use in the subsequent analysis (Dornyei, 2007; Larson-Hall, 2010; Pallant, 2013).

Prior to performing PCA, the suitability of the data for factor analysis was assessed. The sample size was more than adequate (n = 281) and inspection of the correlation matrix of all loadings revealed the presence of many coefficients of .3 and above (Appendix M). The Kaiser-Meyer-Olkin value was .80, exceeding the recommended value of .6 (Pallant, 2013) and Bartlett’s Test of Sphericity reached statistical significance (p = .000), supporting the factorability of the correlation matrix (Tabachnik & Fidell, 2013).

The next step was factor extraction. PCA revealed the presence of ten components with eigenvalues exceeding 1 as shown in Table 5.1 below, explaining 17.03%, 11.78%, 7.36%, 6.24%, 4.17%, 3.89%, 3.62%, 3.07%, 3%, 2.82% of the variance respectively. An inspection of the screeplot (Appendix N) revealed a gradual bend before the horizontal line indicating that either a four-, five- or six-factor solution could be retained (Cattell, 1966). A four-component solution would explain a total of 42.4%, five components would explain 46.6%, while 6 components would explain 50.5% of the variance. A Parallel Analysis was run for confirmation (Pallant, 2013). In this test, six eigenvalues exceeded the corresponding criterion values for a
randomly generated data matrix of the same size (39 items x 281 respondents), meaning that a decision between four and six factors would be safe, as shown by the shaded rows Table 5.1.

Table 5.1

Comparison of Eigenvalues from PCA and Criterion Values from Parallel Analysis

<table>
<thead>
<tr>
<th>Component number</th>
<th>Actual eigenvalue from PCA</th>
<th>Criterion value from parallel analysis</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.64</td>
<td>1.79</td>
<td>Accept</td>
</tr>
<tr>
<td>2</td>
<td>4.59</td>
<td>1.69</td>
<td>Accept</td>
</tr>
<tr>
<td>3</td>
<td>2.87</td>
<td>1.62</td>
<td>Accept</td>
</tr>
<tr>
<td>4</td>
<td>2.44</td>
<td>1.62</td>
<td>Accept</td>
</tr>
<tr>
<td>5</td>
<td>1.63</td>
<td>1.51</td>
<td>Accept</td>
</tr>
<tr>
<td>6</td>
<td>1.52</td>
<td>1.46</td>
<td>Accept</td>
</tr>
<tr>
<td>7</td>
<td>1.42</td>
<td>1.42</td>
<td>Reject</td>
</tr>
<tr>
<td>8</td>
<td>1.19</td>
<td>1.37</td>
<td>Reject</td>
</tr>
<tr>
<td>9</td>
<td>1.17</td>
<td>1.32</td>
<td>Reject</td>
</tr>
<tr>
<td>10</td>
<td>1.10</td>
<td>1.29</td>
<td>Reject</td>
</tr>
</tbody>
</table>

A four-factor solution was forced and the results compared with a five-factor and six-factor solution. Given the sample size, the information from the above checks, and review of the salient loadings in each case, it was determined that a four-factor solution was the best fit. As a high correlation was found between some factors, Oblimin rotation was performed, with all four components showing a number of relatively strong loadings and with all variables loading substantially on only one component as shown in the Structure Matrix Table 5.2 below. Appendix O shows the correlation matrix with unrotated loadings.
Table 5.2
*Pattern and Structure Matrix for PCA with Oblimin Rotation for Four Factor Solution*

<table>
<thead>
<tr>
<th>Item</th>
<th>Pattern coefficients</th>
<th>Structure coefficients</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Component 1</td>
<td>Component 2</td>
<td>Component 3</td>
</tr>
<tr>
<td>I feel motivated to improve my English for my studies</td>
<td>.78</td>
<td>.01</td>
<td>-.02</td>
</tr>
<tr>
<td>I feel motivated to improve my English for my future after graduation</td>
<td>.76</td>
<td>.01</td>
<td>.05</td>
</tr>
<tr>
<td>Students are responsible for improving their academic English</td>
<td>.74</td>
<td>-.11</td>
<td>.08</td>
</tr>
<tr>
<td>I have to make an effort if I want my academic English to improve during my degree</td>
<td>.72</td>
<td>.032</td>
<td>.11</td>
</tr>
<tr>
<td>My academic English is better now than when I started uni</td>
<td>.65</td>
<td>-.00</td>
<td>-.05</td>
</tr>
<tr>
<td>My lecturers/tutors expect my English to improve during my degree</td>
<td>.65</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Motivation to improve my English comes mainly from myself</td>
<td>.64</td>
<td>-.04</td>
<td>.05</td>
</tr>
</tbody>
</table>
At university, I need good academic English to get a good grade

|        | .64 | -.04 | .02 | -.20 | .64 | -.01 | .06 | -.19 | .45 |

My lecturers/tutors motivate me to improve my English

|        | .62 | .12  | -.26 | .26  | .61 | .13  | -.20 | .27  | .52 |

The University is responsible for helping students improve their academic English

|        | .57 | .16  | -.03 | .24  | .58 | .19  | .02  | .25  | .43 |

Academic English improves during degrees because everything is in English

|        | .56 | -.22 | -.09 | .02  | .54 | -.20 | -.08 | .02  | .36 |

English is important for my university studies

|        | .56 | -.03 | .10  | -.20 | .54 | .00  | .13  | -.20 | .37 |

Lecturers/tutors are responsible for helping students improve their academic English

|        | .55 | .20  | -.06 | .28  | .56 | .22  | .00  | .29  | .43 |

My friends/peers motivate me to improve my English

|        | .54 | .12  | -.26 | .33  | .54 | .12  | -.21 | .34  | .48 |

A high standard of English is important to get a good job

|        | .53 | -.07 | .13  | -.19 | .53 | -.04 | .15  | -.19 | .34 |
A successful international student is someone with good grades AND good English.

I wish my academic English had been stronger at the start of my degree.

English will be more important to me after graduation than it is now.

How challenging is it to understand the pronunciation of domestic students?

How challenging is academic speaking for you?

How challenging is it to understand the pronunciation of your lecturers/tutors?

How challenging is it to understand the pronunciation of local people in everyday life?

How challenging is the vocabulary in your degree major?

<table>
<thead>
<tr>
<th></th>
<th>0.50</th>
<th>-0.10</th>
<th>0.04</th>
<th>-0.18</th>
<th>0.49</th>
<th>-0.07</th>
<th>0.07</th>
<th>-0.18</th>
<th>0.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>I wish my academic English had been stronger at the start of my degree</td>
<td>0.49</td>
<td>0.34</td>
<td>-0.01</td>
<td>0.09</td>
<td>0.51</td>
<td>0.37</td>
<td>0.06</td>
<td>0.11</td>
<td>0.38</td>
</tr>
<tr>
<td>English will be more important to me after graduation than it is now</td>
<td>0.33</td>
<td>0.04</td>
<td>0.06</td>
<td>0.32</td>
<td>0.34</td>
<td>0.08</td>
<td>0.09</td>
<td>0.33</td>
<td>0.23</td>
</tr>
<tr>
<td>How challenging is it to understand the pronunciation of domestic students?</td>
<td>-0.08</td>
<td>0.79</td>
<td>0.03</td>
<td>0.13</td>
<td>-0.03</td>
<td>0.79</td>
<td>0.12</td>
<td>0.16</td>
<td>0.65</td>
</tr>
<tr>
<td>How challenging is academic speaking for you?</td>
<td>0.05</td>
<td>0.75</td>
<td>0.07</td>
<td>-0.13</td>
<td>0.09</td>
<td>0.75</td>
<td>0.16</td>
<td>-0.11</td>
<td>0.59</td>
</tr>
<tr>
<td>How challenging is it to understand the pronunciation of your lecturers/tutors?</td>
<td>-0.02</td>
<td>0.73</td>
<td>0.02</td>
<td>0.19</td>
<td>0.02</td>
<td>0.74</td>
<td>0.11</td>
<td>0.21</td>
<td>0.58</td>
</tr>
<tr>
<td>How challenging is it to understand the pronunciation of local people in everyday life? How challenging is the vocabulary in your degree major?</td>
<td>-0.04</td>
<td>0.73</td>
<td>0.00</td>
<td>0.16</td>
<td>0.00</td>
<td>0.74</td>
<td>0.08</td>
<td>0.18</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>0.05</td>
<td>0.72</td>
<td>0.18</td>
<td>-0.14</td>
<td>0.09</td>
<td>0.74</td>
<td>0.26</td>
<td>-0.12</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How challenging is academic reading for you?</td>
<td>-.05</td>
<td>.65</td>
<td>.19</td>
<td>-.09</td>
<td>-.00</td>
<td>.67</td>
<td>.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How challenging is academic writing for you?</td>
<td>.08</td>
<td>.62</td>
<td>.13</td>
<td>-.19</td>
<td>.12</td>
<td>.64</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I started at uni, my academic English was not good enough</td>
<td>.37</td>
<td>.53</td>
<td>-.01</td>
<td>.14</td>
<td>.40</td>
<td>.55</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I started at uni, my academic English was not good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enough for degree studies</td>
<td>.37</td>
<td>.53</td>
<td>-.01</td>
<td>.14</td>
<td>.40</td>
<td>.55</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My academic English is good enough now to graduate</td>
<td>.09</td>
<td>-.49</td>
<td>.08</td>
<td>.24</td>
<td>.08</td>
<td>-.48</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many students don’t care about their level of English so long</td>
<td>.17</td>
<td>-.24</td>
<td>.16</td>
<td>.20</td>
<td>.17</td>
<td>-.21</td>
<td>.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as they pass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How different is the vocabulary used in your degree major to</td>
<td>-.05</td>
<td>-.00</td>
<td>.81</td>
<td>-.01</td>
<td>.00</td>
<td>.08</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the vocabulary used in other contexts?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How different is the vocabulary in your degree major from</td>
<td>.07</td>
<td>.12</td>
<td>.79</td>
<td>-.09</td>
<td>.12</td>
<td>.22</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other degree majors?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How different is academic English in your degree major from</td>
<td>.03</td>
<td>.16</td>
<td>.69</td>
<td>.10</td>
<td>.08</td>
<td>.24</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other degree majors?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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| How different are the types of writing in your degree (e.g. report) from other degree majors? | -0.05 | -0.02 | 0.65 | 0.21 | -0.01 | 0.06 | 0.65 | 0.21 | 0.47 |
| How different is the structure (organisation) of academic writing in English from your language? | 0.14 | -0.05 | 0.62 | -0.10 | 0.17 | 0.03 | 0.62 | -0.11 | 0.42 |
| How different is academic English from the English you use in everyday life? | -0.01 | 0.050 | 0.60 | -0.03 | 0.30 | 0.12 | 0.60 | -0.03 | 0.36 |
| How different is academic English from the English you will use in your professional work after you graduate? | -0.11 | 0.19 | 0.57 | 0.28 | -0.06 | 0.26 | 0.58 | 0.28 | 0.46 |
| I can graduate without a high standard of English | -0.11 | -0.11 | 0.05 | 0.72 | -0.10 | -0.08 | 0.03 | 0.71 | 0.53 |
| I don’t care much about my level of English so long as I pass | -0.23 | 0.12 | -0.05 | 0.65 | -0.22 | 0.13 | -0.05 | 0.65 | 0.50 |
| A good GPA is more important than good English at graduation | -0.07 | -0.04 | 0.11 | 0.58 | -0.06 | -0.01 | 0.10 | 0.58 | 0.35 |
| It is possible to pass a university course with poor academic English | -0.04 | -0.12 | 0.00 | 0.46 | -0.04 | -0.11 | -0.02 | 0.45 | 0.22 |

Notes: Major loadings for each item are in bold. Items that did not load on a single factor are shaded.
The two items which did not load on any of the four factors at >.3 (shaded) were removed from further analysis. As would be hoped, there was a weak correlation with a range of between -.001 and .115 between all the factors as shown in the Component Correlation Matrix in Table 5.3, confirming that they were indeed four separate factors.

Table 5.3

Component Correlation Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td>0.05</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>0.05</td>
<td>1.00</td>
<td>0.12</td>
<td>0.03</td>
</tr>
<tr>
<td>3</td>
<td>0.06</td>
<td>0.16</td>
<td>1.00</td>
<td>-0.001</td>
</tr>
<tr>
<td>4</td>
<td>0.02</td>
<td>0.03</td>
<td>-0.001</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

The final step was to interpret and name these four factors. The items that loaded on the same component (or factor) were analysed to identify the theme (Dornyei, 2007). Component 1 comprised 17 items. These items represented a positive disposition towards improving AELP. It can be seen from Table 5.3 above that the highest loading items on this component were specifically related to the motivation to improve AELP to a good standard and perceived responsibility to do so. This factor was therefore named ‘Motivation and Responsibility to Improve’. It corresponded to all eight items from the Improving English at University section of the survey, plus five items from the Standards of English section and three from the Importance of English section. While motivation and responsibility to improve was noted in the focus groups, here the strength of response is evidenced statistically.

Component 2 contained nine items which were connected to the challenges and difficulties perceived by students with academic English language proficiency; it was therefore named ‘Challenges of AELP’. This component
corresponded to all seven items in the Challenges with Academic English section of the survey plus two from the Standards of English section (“When I started at uni my academic English was good enough for degree studies” and “My academic English is good enough now to graduate”), both of which also suggest challenges to reach a particular level of English at certain stages of study.

The seven items of Component 3 represented descriptions of AELP, including perceived differences in the dimensions and contexts of use such as everyday versus academic. This factor was therefore termed ‘Defining AELP’. This component matched the seven items of the survey in the Describing Academic English section.

Component 4 comprised four items. Three of the four items came from the Importance of English section of the survey and one from the Standards of English. The items represented were related to the role of English for passing university courses or graduating. It was therefore named ‘Importance of English for Academic Success’.

These four factors explain 42.4% of the total variance (17.03%, 11.78%, 7.36%, and 6.24% respectively). Based upon these results, there is support for further statistical analysis.

5.2.2 Descriptive statistics of the four scales

The PCA process above provided an empirical summary of the dataset (Tabachnick & Fidell, 2013) and four validated scales, made from the variables which loaded onto each individual factor. Prior to further analysis, the reliability of the scales was checked (Woodrow, 2014). The table below shows the survey taxonomy, reliability estimates, the mean, median, standard deviation, skewness and kurtosis for each scale, i.e. Motivation and Responsibility to Improve, Challenges of AELP, Defining AELP, Importance of English for Academic Success. Cronbach’s alpha coefficient was used to
measure the internal consistency of this instrument. There was good overall consistency ($\alpha = .80$) as well as at the subscale level ($\alpha = .91, .84, .84$ and .62 respectively), and this was more than adequate for further statistical analysis (Dornyei, 2007).

Table 5.4

Summary of the Descriptive Statistics of the Four Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of item (n)</th>
<th>Reliability estimate ($\alpha$)</th>
<th>Mean (M)</th>
<th>Median (Mdn)</th>
<th>Mode</th>
<th>SD</th>
<th>Skewness</th>
<th>Std error (skewness)</th>
<th>Kurtosis</th>
<th>Std error (kurtosis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation &amp; Responsibility to Improve*</td>
<td>17 ($n = 221$)</td>
<td>.91</td>
<td>70.9</td>
<td>72</td>
<td>70</td>
<td>8.1</td>
<td>.78</td>
<td>.16</td>
<td>.29</td>
<td>.33</td>
</tr>
<tr>
<td>Challenges of AELP</td>
<td>9 ($n = 253$)</td>
<td>.84</td>
<td>28.4</td>
<td>28</td>
<td>24</td>
<td>5.9</td>
<td>.15</td>
<td>.15</td>
<td>-1.02</td>
<td>.31</td>
</tr>
<tr>
<td>Defining AELP</td>
<td>7 ($n = 209$)</td>
<td>.84</td>
<td>23.32</td>
<td>24</td>
<td>21</td>
<td>5.0</td>
<td>-.10</td>
<td>.17</td>
<td>-1.59</td>
<td>.33</td>
</tr>
<tr>
<td>Importance of Academic Success</td>
<td>4 ($n = 243$)</td>
<td>.62</td>
<td>11.1</td>
<td>11</td>
<td>9</td>
<td>3.27</td>
<td>.21</td>
<td>.16</td>
<td>-4.27</td>
<td>.31</td>
</tr>
</tbody>
</table>

*Note: Outliers were brought into normality

The descriptive statistics above revealed that the Challenges of AELP, Defining AELP and Importance of English for Academic Success scales met assumptions of normality, as is visually evident in the histograms in figure 5.7-5.9 below. This normal distribution means that there was a range of views from strongly disagree (far left on the y axis) to strongly agree (far right).
Figure 5.7. Histogram showing the Challenges of AELP scale

Figure 5.8. Histogram showing the Importance of English for Academic Success scale
Because of the skewness (-1.95) and kurtosis (6.06) on the Motivations and Responsibility to Improve Scale, it was clear that a number of participants were outliers. This is visually evident in the first histogram below at the left end of the y axis. As suggested by Field (2009) and Pallant (2013), these nine outliers in the tail were brought into normality by raising the scores to 50, i.e. two standard deviations below the mean. The second histogram in the figure below and the descriptives in Table 5.4 above show the data after it was brought into normality. In relation to this scale, it is also of interest to note that the views were more negatively skewed that the other three scales; that is, more responses clustered at the agree end, meaning that in general participants reported strong views about motivation and the responsibility for improving AELP.

**Figure 5.9. Histogram showing the Defining AELP scale**
Figure 5.10. Histograms showing the Motivation and Responsibility to Improve scale before and after transformation

As a result of these tests of normality and the factor analysis procedure followed above, which provides an argument of linearity, parametric tests could be selected for further analysis.
5.2.3 Inferential statistics: differences in perceptions by the key variables

In this section we consider differences in perceptions between groups. Parametric tests were conducted to investigate differences on the four factor scales (Motivation and Responsibility to Improve, Challenges of AELP, Defining AELP, and Importance of English for Academic Success) among the six grouping variables (gender, first language, academic group, entry pathway, stage of degree, and expected length of stay in Australia post-graduation).

The alpha level was set at .05, and the confidence interval (CI) set at 95%. For the ANOVA tests, the Holm-Bonferroni Method of sequentially rejective Bonferroni was used to adjust for potential type 1 errors (Holm, 1979) rather than the classical adjustment, i.e. hypotheses are rejected one at a time.

Each of the six grouping variables is considered in turn.

Gender

To investigate whether there was a difference in response by gender, an independent t-test was conducted on each of the scale scores (Motivation and Responsibility to Improve, Challenges of AELP, Defining AELP, Importance of English for Academic Success). None were found to be significant except for the Importance of English for Academic Success Scale. For this latter scale, responses from females ($M = 10.7$) were found to be significantly different from males ($M = 11.6$) ($t(242) = -1.991, p = .045, d = .26$). As a higher mean score represents a higher degree of agreement, it means that males tended to have stronger views than females. However, there are caveats around this finding: under Bonferroni for type 1 errors, the alpha level would be adjusted to .025, which makes this difference non-significant. Also, the effect size, calculated using Cohen’s $d$, is very small at .26 (Becker, n.d.; Cohen, 1988), which reinforces the view that the strength of association is
small and that gender has no practical significance. We can therefore reject gender as a key variable in this dataset.

*First language*

The seven first language groups (Chinese, English, European languages, Korean, Indian languages, Vietnamese, Other) were considered on each of the scale scores to ascertain if there were any differences in perceptions by this variable. The table below summarises the findings of the ANOVA tests in which a significant difference was found across language groupings for three of the four scales. However, after Bonferroni adjustment, only the Challenges of AELP Scale remained significant \( F(6, 244) = 7.23, p = .000 \).

Table 5.5

**First Language Differences by the Four Scales in Order of Significance**

<table>
<thead>
<tr>
<th>Scale</th>
<th>( F ) value</th>
<th>( p ) value</th>
<th>( p ) value required after adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges of AELP</td>
<td>7.23</td>
<td>.000</td>
<td>.05</td>
</tr>
<tr>
<td>Defining AELP</td>
<td>2.87</td>
<td>.01</td>
<td>.001</td>
</tr>
<tr>
<td>Motivations &amp; Responsibility to</td>
<td>2.15</td>
<td>.049</td>
<td>.025</td>
</tr>
<tr>
<td>Improve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of English for Academic</td>
<td>.48</td>
<td>.84</td>
<td>.0125</td>
</tr>
<tr>
<td>Success</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Post hoc comparisons revealed significant differences and large effect sizes, calculated using Cohen’s \( d \) (Becker, n.d), between the following language groups on this scale: Chinese and English \( (d = 1.139) \), Chinese and European languages \( (d = .766) \) and Chinese and Indian languages \( (d = 1.05) \). Similarly English and Korean \( (d = -1.122) \), English and Vietnamese \( (d = -1.43) \), Korean and European languages \( (d = .89) \), and Korean and Indian languages \( (d = 1.14) \) showed significant differences. Vietnamese responses were also found
to be significantly different to those from European speakers ($d = 1.135$), Indian speakers ($d = 1.36$) and those from Other language backgrounds ($d = .81$). The large effect sizes in all cases indicate that the magnitude of the impact of first language on perceived challenges of AELP was meaningful in a practical sense and therefore important to understand (Larson-Hall, 2010). These significant mean differences and confidence intervals between language groups for this scale are summarised in Table 5.6 below.

Table 5.6

Post hoc Test on Challenges Scale and First Language

<table>
<thead>
<tr>
<th>First language (I)</th>
<th>First Language (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Chinese</td>
<td>English</td>
<td>5.91</td>
<td>1.66</td>
<td>.008</td>
<td>.98</td>
</tr>
<tr>
<td></td>
<td>European</td>
<td>3.77</td>
<td>1.20</td>
<td>.031</td>
<td>.20</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>5.33</td>
<td>1.55</td>
<td>.012</td>
<td>.74</td>
</tr>
<tr>
<td>English</td>
<td>Korean</td>
<td>-7.22</td>
<td>1.93</td>
<td>.004</td>
<td>-12.96</td>
</tr>
<tr>
<td></td>
<td>Vietnamese</td>
<td>-9.17</td>
<td>2.24</td>
<td>.001</td>
<td>-15.84</td>
</tr>
<tr>
<td>Korean</td>
<td>European</td>
<td>5.08</td>
<td>1.55</td>
<td>.021</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>6.65</td>
<td>1.83</td>
<td>.006</td>
<td>1.19</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>European</td>
<td>7.03</td>
<td>1.93</td>
<td>.006</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>8.59</td>
<td>2.16</td>
<td>.002</td>
<td>2.17</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>5.88</td>
<td>1.85</td>
<td>.028</td>
<td>.37</td>
</tr>
</tbody>
</table>

The pattern of mean scores is evident visually in figure 5.11 below, showing the direction of perceived challenge from least to most. The higher the score, the greater the perception of challenge. It is evident that the greatest challenges were reported by students from Expanding Circle (Kachru, 1982) countries including China, Korea and Vietnam. In contrast, participants from cognate language backgrounds and where English has a societal role as a lingua franca (ELF) such as in India perceived relatively less challenge with AELP.
Although the Motivations & Responsibility to Improve Scale and Defining AELP Scale fell outside of significance after Bonferroni correction, the direction of the mean scores for these two scales in relation to first language is consistent with the findings above. The bar chart below shows that, again, those from language backgrounds in the Expanding Circle typically report higher levels of motivation and perceptions of responsibility to improve their AELP.

Figure 5.11. Mean scores on the Challenges of AELP Scale by first language

Figure 5.12. Mean scores on the Motivations and Responsibilities to Improve Scale by first language
The pattern is also evident on the Defining AELP scale, where Expanding Circle participants report higher levels of awareness of the existence of different dimensions and contexts of use of AELP than those from ESL, ELF and cognate language backgrounds. Therefore, it can be concluded that first language impacts student conceptualisations.

![First language and defining AELP](image)

*Figure 5.13. Mean scores on the Defining AELP Scale by first language*

**Stage of degree**

The three groupings for stage of degree (First semester, final semester, other semester) were considered on each of the scale scores to ascertain if there were any differences in perceptions. The one-way ANOVA found a significant difference between stage of degree on the Motivations and Responsibility to Improve Scale \(F(2, 221) = 3.310, p = .038\) and this remains significant after Holm-Bonferroni correction. The difference in mean scores between groups was quite small and post-hoc comparisons using the Tukey test only found significance between First semester and Other semester responses \(p = 0.38\) and the effect size was medium \(d = .40\). First semester participants had the highest means (and therefore the strongest views). Other semester participants (i.e. those between second and fifth semester) had the lowest means and therefore the least strong views as shown in the table below.
Table 5.7

*Stage of Degree Mean Scores and Perceived Motivation and Responsibility to Improve*

<table>
<thead>
<tr>
<th>Stage of degree</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other semester</td>
<td>61</td>
<td>69.15</td>
<td>8.27</td>
</tr>
<tr>
<td>Final semester</td>
<td>62</td>
<td>70.27</td>
<td>8.36</td>
</tr>
<tr>
<td>First semester</td>
<td>98</td>
<td>72.38</td>
<td>7.69</td>
</tr>
</tbody>
</table>

The line graph below plots the difference in views graphically, showing that reported motivation and responsibility for developing AELP are strongest at the outset of undergraduate degrees but then reduce over time until the penultimate semester of study, at which point they rise again sharply before a slight drop in final semester.

*Figure 5.14. Mean scores on the Motivations and Responsibilities to Improve Scale by number of semesters*

**Academic group, entry pathway, expected length of stay in Australia**

An ANOVA was conducted on the remaining key variables: academic group, entry pathway, and expected length of stay in Australia post-graduation for each of the four scales. No statistically significant difference was found,
meaning that differences in perceptions are not influenced by these three variables.

5.3 Discussion

The survey questionnaire was used to further investigate and potentially confirm the suggestive trends that emerged from the focus group in Part 1 through consideration of the distribution and intensity of student responses. Despite being less in-depth than the qualitative feedback received via focus groups, there was considerable consensus in perceptions of ELP in higher education across the two methods of data collection, and the survey provided useful triangulation as well as corroboration of the qualitative feedback. In this discussion section, the results of the focus groups and the survey findings are integrated and related back to the research questions about student conceptualisations.

5.3.1 Conceptualisations of ELP by topic

This section relates back to RQ 1.1:

How do undergraduate international EAL students conceptualise ELP within higher education?

Students generally agreed that English was a prerequisite to obtaining a good university course grade, though they also felt that it was possible to gain a basic passing grade with relatively poor English. Around half reported that they retrospectively believed their English had not been good enough to commence their degrees. Three quarters of the respondents felt that they had improved their ELP since entry but had not yet reached the level they expected or needed to be by the time of graduation. This view was also consistent with the focus group findings and suggests that students view themselves moving along a continuum of development from entry to graduation. A view of ELP developing during degree programs mirrors policy
documentation and the literature, including the GPPs (DEEWR, 2009), the ELSHE (AUQA, 2012) and the ELP developmental continuum proposed by O’Loughlin and Arkoudis (2012), which all focus on development from entry via experience to exit.

A variety of challenges with AELP are perceived by students, though the productive skills present the greatest perceived challenges, especially writing. This is entirely consistent with other literature, both in terms of actual outcomes and students’ perceptions (Humphreys et al., 2012; Knoch et al., 2015; Storch & Hill, 2008). In several studies, students have indicated that actual and perceived challenges with writing were due in part to the limited need to produce extensive writing texts over the course of their degree, which may negative impact writing development. Indeed, Knoch et al. (2015) suggest that more work should be done to investigate the impact of limited written output on the development of this skill. A lack of feedback from academics on language was also raised by students and indicates mismatched expectations. Lack of feedback has been cited in the literature as a reason for limited development in the writing, even though the literature suggests that corrective feedback can lead to improved accuracy in writing (Bitchener & Knoch, 2009; Ellis, Sheen, Murakami & Takashima, 2008; Van Beuningen, de Jong & Kuiken, 2012).

Linguistic difficulties were also related to understanding pronunciation, although fewer issues were reported in relation to native speaker academics than EAL academics, domestic students or local people. The findings suggest that ‘native speaker’ academics in particular make accommodations for their EAL students and that it is in fact beyond this relationship that students experience the greatest challenges with understanding pronunciation.

Few challenges were noted in relation to vocabulary or reading. Academic vocabulary was viewed as an obvious difference but did not present too much of a perceived challenge. Little perceived challenge was also noted in relation
to the reading skill, though this may be because it is not a skill that is explicitly assessed outside of the traditional language classroom. It may also be because this skill improves as a result of extensive reading during degree studies (Knoch et al., 2015) or because students are less able to articulate issues in relation to this receptive skill.

Describing AELP understandably posed difficulties for students in both the focus groups and the survey. They were sometimes unable to comment on disciplinary differences, perhaps due to lack of exposure to other subjects or because they had not previously given consideration to other subjects areas. It might also be because apprenticing to the discipline is taught (and acquired) implicitly and over time, and therefore is occurring relatively unnoticed. Discipline vocabulary, on the other hand, was clearly perceived as a differentiating factor, and differences between L1 and L2 were also readily noted. Everyday language was also perceived to be very different to language for academic purposes, though professional English was not, suggesting that students see only two strongly differing contexts of use. This latter finding may be due to a lack of experience with the language of the workplace as they are still in their undergraduate programs, or it may be due to a close alignment (perceived or real) between the specialised discourses of academic and professional contexts. This is an important finding and corroborates the views from the focus group data. It is notable because it differs from the models suggested by Murray (2010) and Harper et al. (2011), who present professional literacies as a third and separate dimension. If this is, in fact, a key dimension, it is not one that undergraduate students appear cognisant of.

It is clear that students perceive the responsibility to improve their AELP to reside largely with themselves. Acceptance of responsibility also seems a pre-requisite for the motivation to improve. The second highest level of agreement on the questionnaire was in relation to whether students felt motivated to improve their ELP, to which 90% agreed or strongly agreed. However, they do see others playing a part in that process, including the
institution and academic teaching staff. This view of shared responsibility for developing ELP is consistent with the view of Arkoudis & Doughney (2014) who propose a model of distributed responsibilities for staff, dependent on their professional role, as well as students.

The importance of English to university studies was confirmed in the survey and this topic elicited strong levels of agreement. Indeed, the highest level of agreement on the survey was in relation to whether English is important for university studies: 96% agreed or strongly agreed. There was also strong agreement that English would be more important after graduation and that it was vital for finding a good job, although a good GPA was also viewed as critical. This points to the fact that ELP is viewed by student as a vital skill but not the only attribute required for success. This is consistent with the literature on employability attributes desired by employers, who expect a strong command of English in addition to a range of other ‘soft skills’ (Arkoudis, et al., 2009; Gribble & Blackmore, 2012; Humphreys & Gribble, 2013; Watty, 2007).

5.3.2 Conceptualisations of ELP by the variables

This section returns to RQ 1.2:

Is there any systematic variability in conceptualisations correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or stage of degree?

To answer this question, four factors were used, derived after undertaking PCA to create statistically validated scales. It was found that perceptions of challenges with AELP were significantly impacted by first language background. The greater the typological distance (Chan & Sylva, 2014; Gu, 2013; Skehan, 2008) between English and their first language, the stronger the perceived challenge. The outcomes also mirror the US Defence Language Institute Language Learning Difficulty Scale, which rates Chinese and
Korean in category 4 (the hardest category of language for English-speakers to learn), Indian languages in category 3, and many of the languages in ‘Other’ in higher categories. It may be that the same difficulty (and therefore time to acquire) is required to improve for speakers of these languages into English. Respondents from the Expanding Circle typically reported higher levels of challenge than those from other language backgrounds. This finding may not be surprising to applied linguists, yet it is of interest that students’ own perception of difficulty is related to their L1. Although the differences between language groups fell outside of significance after Bonferroni correction for some scales, the pattern of means scores on the Motivations and Responsibility to Improve Scale and Defining AELP Scale added weight to the above finding above, i.e. those with most familiarity with English reported being the least motivated and felt the least responsibility to improve it. Conversely, those with more distance from English perceived greater motivation to improve AELP and the responsibility for doing so.

It was also of interest to note that stage of degree had some impact on motivations and responsibility. Students in their first semester reported strong motivation and responsibility for developing AELP. This declined after first semester until the penultimate semester of study, at which point in time it rose again, followed by a dip in final semester. This may be because final semester or capstone courses are (or are perceived to be) more challenging. Alternatively, and more probably, ELP has become front of mind as students become more focused on post-graduation plans. This pattern in motivation levels is a critical finding.

No statistically significant difference was found for any of the other variables. Rather than a lack of finding, however, this is, in fact, viewed as a meaningful one. It supports the view that the patterns of beliefs discussed in the previous section were not related to gender, academic discipline, entry pathway, or post-graduation plans. More statistically significant findings might have been anticipated: anecdotal discussion and comments in the scholarly literature
suggests that students who enter via non-test pathways perform poorly compared with those who enter by test (Oliver, Vanderford, et al., 2012), for example. It might also have been assumed that students enrolled in language-rich disciplines would be more interested in developing their AELP than those enrolled in more scientific-oriented disciplines, or that those intending to remain in Australia would have different perceptions to those intending to return home after graduation. Given the strength of the loading and the high level of reliability of the Motivations and Responsibilities to Improve scale, it might also have been anticipated that more significant findings would have been identified in relation to this theme within these variables. It is of particular note that this study did not find any of these assumptions to be the case.

This suggests that views are more individualised than might typically be assumed and warns us to beware of generalising about students based on the variables used in this study. This is consistent with the literature, which has long discussed individual differences in language learners and motivations as discussed in Chapter 2 (Dornyei, 2005; Ellis, 2004; Gardner, 1985; Gardner & Lambert, 1972; Hulstjin & Bossers, 1992; Larsen-Freeman, 2007; Skehan, 1989, 2002). In general, perceptions of AELP were found to differ largely by the individual. However, perceived challenge was found to be dependent to a considerable degree on first language, while motivation and responsibility were found to be dependent on stage of degree.
Chapter 6: Part 3: Statistical analysis of student outcomes

This chapter presents the findings of Part 3: the statistical analysis of student outcomes, in order to answer RQ 2:

2.1 What are the graduating outcomes of undergraduate international EAL students (as measured by IELTS (Academic) and GPA)?

2.2 Is there any systematic variability in outcomes correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or reason for taking the IELTS test?

This is shown visually in figure 6.1.

![Figure 6.1: Research design Part 3](image)

Descriptive statistics are presented in section 6.1, followed by the results of the inferential statistical tests for IELTS (section 6.2), GPA (section 6.3) then IELTS/GPA outcomes combined (section 6.4. The findings are discussed at the end of the chapter in section 6.5.
6.1 Descriptive statistics

6.1.1 The scale variables

The findings for the two scale variables, GPA and IELTS Overall, are summarised in Table 6.1, and the two histograms in figures 6.2 and 6.3 visually show the distribution of scores. GPA was found to have some minor skewing (.41/.103) and IELTS Overall was also found to be slightly positively skewed (.52/.103). However, skewing is to be expected in this dataset (due to thresholds for entry/passing subjects), and is not generally regarded as problematic from the statistical perspective (Field, 2009).

It can be seen that there was a spread of scores on both measures, ranging from 4.0 to 9.0 for IELTS and from 2.96 to 6.9 for GPA, and both with wide standard deviations (SD).

Table 6.1

Summary of GPA and IELTS Overall Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELTS Overall (0-9)</td>
<td>564</td>
<td>4.0</td>
<td>9.0</td>
<td>6.61</td>
<td>6.5</td>
<td>.85</td>
</tr>
<tr>
<td>GPA (0-7)</td>
<td>564</td>
<td>2.96</td>
<td>6.9</td>
<td>4.67</td>
<td>4.57</td>
<td>.77</td>
</tr>
</tbody>
</table>
The data show that 38% \((n = 214)\) of this cohort graduated with IELTS Overall scores in the ‘good user’ range of IELTS \(\geq 7.0\). A further 24% \((n =\) \))
136) obtained the most typical score of 6.5. We can also see that 23% \((n = 130)\) graduated with scores at the level that was required to enter undergraduate programs at the research site (IELTS 6.0), and a further 15% \((n = 84)\) graduated with scores below that entry minimum. The most typical graduating GPA was 4.57, in the middle of the ‘pass’ grade (see Appendix H). The majority obtained GPAs in the mid-range \((n = 427)\), and few in the low \((n = 102)\) or high range \((n = 35)\).\(^{23}\)

As well as an overall score, the IELTS test reports scores for each of the four macro skills of Listening, Reading, Writing and Speaking. Subscore means, medians, minimums and maximums for each macro skill are given in Table 6.2. Histograms for each skill show the visual pattern in figure 6.4 below. It can be seen that the span of scores for each macro skill was also wide, ranging from IELTS 4.0 to 9.0, with wide standard deviations for all skills. The highest scores were typically achieved in Listening \((M = 6.85)\), followed by Speaking \((M = 6.8)\) and the lowest scores in Writing \((M = 6.1)\).

Table 6.2

<table>
<thead>
<tr>
<th>Score</th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
<th>Speaking</th>
<th>IELTS Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.85</td>
<td>6.44</td>
<td>6.09</td>
<td>6.8</td>
<td>6.61</td>
</tr>
<tr>
<td>Median</td>
<td>7.0</td>
<td>6.5</td>
<td>6.0</td>
<td>6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>SD</td>
<td>.99</td>
<td>1.02</td>
<td>.84</td>
<td>1.05</td>
<td>.85</td>
</tr>
<tr>
<td>Minimum</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Maximum</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

\(^{23}\) See Chapter 3 section 3.5.6 for the explanation of how these groupings were set.
6.1.3 Score gains of IELTS Entry pathway participants

Although this is not predominantly a score gain study, 15% \((n = 86)\) of the participants had verified IELTS test scores in the University database\(^\text{24}\) as evidence of language levels for entry to the University, and it was therefore

\(^\text{24}\)Although 99 participants declared that they entered by test, in some cases IELTS scores were missing from the University database. A further three had entered using tests other than IELTS.
possible to investigate score shifts of this subgroup. A paired t-test was conducted on this group to evaluate the difference in mean test scores at and exit. A statistically significant increase in IELTS Overall was observed from entry \((M = 6.52, SD = .55)\) to exit \((M = 6.91, SD = .78)\), \(t(86) = 6.34, < .000\) (two-tailed). The mean increase was .38 of a band score during the undergraduate program (95% confidence interval ranging from .26 to .50).

Based upon this significant t-test, a cross tabulation was run and a highly significant association was found between entry and exit scores \((\chi^2 (28, n = 86) = 87.09, p = .000)\). Due to the small numbers in this subgroup, only hand counting could be undertaken to explore pre/post shift. Table 6.3 below shows the correlation of the pre/post test results, showing that the most common increase was from 6.0 at entry to 6.5 at exit. Twenty-two participants (26% of this subgroup) scored the same overall score at exit as they had scored at entry while 54 (63% of this subgroup) improved their score. Ten participants (12% of this subgroup) obtained a lower score at exit than they had entered with.

Table 6.3

*Cross tabulation of Pre- and Post- IELTS Scores*

<table>
<thead>
<tr>
<th>IELTS Overall post-test scores</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5</td>
<td>6.0</td>
</tr>
<tr>
<td>6.0</td>
<td>4</td>
</tr>
<tr>
<td>6.5</td>
<td>6</td>
</tr>
<tr>
<td>7.0</td>
<td>1</td>
</tr>
<tr>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>
6.1.4 Exit scores of focus group participants

Of the 37 focus group participants, twelve were in the final semester of their undergraduate program at the time of the research and therefore eligible to take the IELTS4grads exit test. Six of the twelve had already taken the test at the time of the focus group and it was therefore possible to analyse the results of these six and compare them to the entire cohort. Due to the size of the subcohort, only descriptive analysis can be undertaken.

The profile and exit scores of these six focus group participants are given in Table 6.4 below. As per the larger cohort, the most common exit score for this subgroup was IELTS 6.5; three participants obtained this score. One participant scored an IELTS 7.0 (Participant 13), but test centre data showed that he had taken the test six times before obtaining the score he required to meet subscore and overall score minimums for a Graduate Skilled Migration visa application. Two participants scored IELTS 6.0 at exit and several had subscores of IELTS 5.5 as shown in the table below.

Table 6.4

IELTS Academic Exit Test Scores of Focus Group Participants

<table>
<thead>
<tr>
<th>No.</th>
<th>First language</th>
<th>Entry pathway</th>
<th>Discipline</th>
<th>Reason for test</th>
<th>L</th>
<th>R</th>
<th>W</th>
<th>S</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Vietnamese</td>
<td>Pathway Partner</td>
<td>Finance/Economics</td>
<td>migration</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>Vietnamese</td>
<td>Test (IELTS) Accounting</td>
<td>registration</td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Korean</td>
<td>Pathway Partner</td>
<td>Nursing</td>
<td>registration</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>Chinese</td>
<td>Pathway Partner Accounting</td>
<td>registration</td>
<td></td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>15</td>
<td>Vietnamese</td>
<td>EAP</td>
<td>Accounting</td>
<td>migration</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>17</td>
<td>Indonesian</td>
<td>Unspecified Business</td>
<td>International</td>
<td>migration</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Only one student from the group had entered the University using IELTS (Participant 10). Her pre/post test results are given in Table 6.5 below and show that, across her three-year undergraduate degree, there was a half band increase in three of the four macro skills: Listening, Reading and Writing. However, her Speaking score decreased by 0.5 of a band, thus resulting in no difference to the Overall score between entry and exit.

Table 6.5

*Participant 10 Pre- and Post- IELTS Scores*

<table>
<thead>
<tr>
<th></th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
<th>Speaking</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>6.0</td>
<td>5.5</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Post-test</td>
<td>6.5</td>
<td>6.0</td>
<td>6.5</td>
<td>5.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>
6.2 Analysis of IELTS outcomes

6.2.1 Preliminary plots of data

In this section of the analysis, we test the relationship between the Overall IELTS score and the five variables of Gender, aggregated First language group, Academic group, Entry pathway and aggregated Reason for taking the test, as described in the Methodology chapter section 3.5.7. First, the data of each of these variables for the IELTS Overall score is graphed using boxplots for initial visual checking. Boxplots graphically depict the distribution of scores and their quartiles. The rectangle shows the central 50% of scores in the interquartile range (IQR), and the median score is shown by a bar (or dot) inside that rectangle. The dotted lines and ‘T bars’ (or ‘whiskers’) at each end show the first and third quartile of the scores. Any circles within the boxplot indicate outliers; that is, those outside of the IQR.

In the boxplot of IELTS Overall and Gender in figure 6.5, the rectangles are at similar levels and the solid line is in the same position for both females and males, meaning there is no evident visual difference between the genders on IELTS.

Figure 6.5. Boxplot of IELTS Overall by Gender
However, when we run further preliminary plots, we do see differences occurring as shown in the boxplot of IELTS Overall split by Gender and First language in Figure 6.6. There are marked differences, for example, between males and females from Austronesian and Indo European backgrounds, with males on average scoring much lower, though males from Chinese backgrounds tended to scored slightly higher than females.

![Figure 6.6. Boxplot of IELTS Overall split by Gender and First Language group](image)

Some differences are also seen in the boxplot of IELTS Overall split by Gender and Academic group (figure 6.7), with SEET females obtaining higher scores on average than males, though no further difference is evident by Academic group.
Figure 6.7. Boxplot of IELTS Overall split by Gender and Academic group

Boxplots for Gender split by Entry pathway and split by Reason for taking the test are shown in figures 6.8 and 6.9. Differences are less evident for Gender when split by these variables and suggest individual variability.
**Figure 6.8.** Boxplot of IELTS Overall split by Gender and Pathway

**Figure 6.9.** Boxplot of IELTS Overall split by Gender and Reason
Therefore it seems that, while gender outcomes were not different on average for the whole cohort, when we drilled down further, there was some variability in relation to First language in particular. We investigate this further through the linear regression in section 6.2.2 below.

For the other four variables, the boxplots in figures 6.10-6.13 show First language Academic group, Entry pathway, and Reason for taking the test. Visual differences can be seen for First language and, to a lesser extent, Entry Pathway. Little visual difference is evident for Academic group or Reason for taking the test. Each is further investigated through the linear regression in the next section to assess the statistical significance of possible differences.

Figure 6.10. Boxplot of IELTS Overall and First Language
Figure 6.11. Boxplot of IELTS Overall and Academic group

Figure 6.12. Boxplot of IELTS Overall and Entry pathway
6.2.2 Linear regression analysis for IELTS

Linear regression was used to analyse the IELTS (Academic) outcomes in relation to the five variables. The regression model used was:

\[
\text{Overall IELTS} = \text{Intercept} + \text{Gender} + \text{First Language} + \text{Academic group} + \text{Entry pathway} + \text{Reason for test}
\]

Table 6.6 provides the estimated coefficients of linear regression for IELTS outcomes, including the mean differences and 95% credible intervals (CI) for the model.
Table 6.6

(coefficients of linear regression (IELTS)

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Mean</th>
<th>LCI</th>
<th>UCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>8.14</td>
<td>7.83</td>
<td>8.45</td>
</tr>
<tr>
<td>Females</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>-0.14</td>
<td>-0.27</td>
<td>-0.02</td>
</tr>
<tr>
<td>GBS</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>-0.33</td>
<td>-0.65</td>
<td>0.00</td>
</tr>
<tr>
<td>Austronesia</td>
<td>-0.78</td>
<td>-1.18</td>
<td>-0.38</td>
</tr>
<tr>
<td>Chinese</td>
<td>-1.45</td>
<td>-1.72</td>
<td>-1.18</td>
</tr>
<tr>
<td>Indian</td>
<td>-0.91</td>
<td>-1.20</td>
<td>-0.62</td>
</tr>
<tr>
<td>Indo-European</td>
<td>-0.35</td>
<td>-0.67</td>
<td>-0.03</td>
</tr>
<tr>
<td>Korean</td>
<td>-1.39</td>
<td>-1.70</td>
<td>-1.10</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>-1.56</td>
<td>-1.90</td>
<td>-1.20</td>
</tr>
<tr>
<td>AEL</td>
<td>-0.06</td>
<td>-0.29</td>
<td>0.17</td>
</tr>
<tr>
<td>Health</td>
<td>-0.18</td>
<td>-0.38</td>
<td>0.03</td>
</tr>
<tr>
<td>SEET</td>
<td>0.15</td>
<td>-0.04</td>
<td>0.35</td>
</tr>
<tr>
<td>TEST</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP</td>
<td>-0.57</td>
<td>-0.81</td>
<td>-0.32</td>
</tr>
<tr>
<td>LOI</td>
<td>-0.18</td>
<td>-0.35</td>
<td>0.00</td>
</tr>
<tr>
<td>PP</td>
<td>-0.40</td>
<td>-0.57</td>
<td>-0.24</td>
</tr>
<tr>
<td>Employment in</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further study</td>
<td>-0.23</td>
<td>-0.42</td>
<td>-0.06</td>
</tr>
<tr>
<td>Migration</td>
<td>-0.04</td>
<td>-0.19</td>
<td>0.11</td>
</tr>
<tr>
<td>Other</td>
<td>0.03</td>
<td>-0.17</td>
<td>0.23</td>
</tr>
<tr>
<td>Sigma</td>
<td>0.65</td>
<td>0.62</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Notes: LCI = Lower Credible Interval; UCI = Higher Credible Interval.

The intercept incorporates all of the baseline estimates.

Statistically significant differences are shaded.
The base level of each factor in the model is included in the intercept. For example, a female has the coefficient set at zero and males are compared to females. Coefficients are also set at zero for GBS (Academic group), Test (Entry pathway), Employment in Australia (Reason for test), and English (First Language)\textsuperscript{25}.

If zero is contained between the lower and higher credible interval (LCI and UCI respectively), there is not a significant effect of this level of the variable over the base level. For example, we can see that those taking the test for Migration purposes did not score significantly differently to those taking it for Employment in Australia because zero is contained in the range of its CI (-0.19 to 0.11). However, Chinese students were found to perform significantly differently to students from an English-speaking background for IELTS Overall by the fact that zero is not in the CI range (-1.72 to -1.18) and we know their performance was worse because the coefficient is a negative number.

Statistically significant differences from the base level are shaded in the table and found to be as follows:

- **Gender**: males obtained marginally lower scores than females but only -0.14 of a mean band score
- **First language**: all language groups obtained statistically significantly lower scores than English speakers, ranging from 0.33 of a band score lower for speakers of African languages to 1.56 of a band score lower for Vietnamese speakers.
- **Academic group**: no statistically significant difference was found between GBS and the other Academic groups
- **Entry pathway**: DEP and PP obtained statistically significantly lower scores than those who entered by Test (-0.57 and -0.4 of an IELTS band score on average respectively)

\textsuperscript{25} The choice of each base level for the intercept does not affect the findings.
Reason for test: those taking the test for Further study obtained statistically significantly lower scores than those taking it for Employment in Australia (-0.23 of a mean band score) and lower than all other reasons.

Differences within the variables were further explored. For each of the variables, we take the posterior draws from the Gibbs sampler (see Appendix L) to estimate the number of times the draw for one coefficient was greater than its comparison. In the following tables providing the posterior draw figures (Tables 6.7-6.10), values of around 0.5 indicate little (if any) difference between the two groups, differences of 0.70 indicate possible differences while values of 0.90 or above indicate significant differences. Where a significant difference is found, the mean from the coefficients of linear regression in Table 6.6 is taken to see the magnitude of that difference between relevant groups.

**Gender**

Gender has already been discussed. The mean difference between males and females was found to be negligible.

**First language**

Table 6.7 below provides the posterior draws for First language. There are numerous significant differences, shown by values that exceed 0.9, which are shaded in the table.
Table 6.7

*Posterior Draws for First Language (IELTS)*

<table>
<thead>
<tr>
<th>Austronesian</th>
<th>Chinese</th>
<th>Indian</th>
<th>Indo European</th>
<th>Korean</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>African</td>
<td>0.99</td>
<td>1</td>
<td>1</td>
<td>0.56</td>
<td>1</td>
</tr>
<tr>
<td>Austronesian</td>
<td>-</td>
<td>1</td>
<td>0.78</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Chinese</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>0.72</td>
</tr>
<tr>
<td>Indian</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Indo</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Korean</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Notes: shading denoted highly statistically significant values*

The following statistically significant differences are found by referring to the above table and also to the mean differences in Table 6.6:

- African speakers obtained statistically higher scores than all other language groups except Indo European
- Austronesian scored differently to all language groups except Indian speakers and vice versa
- Indo European obtained statistically higher scores than all language groups except speakers of African languages
- Chinese scored statistically significantly worse than all language groups except Koreans and Vietnamese
- Korean scored worse than all groups except Chinese and Vietnamese
- Vietnamese scored worse than all except Korean and Chinese
The direction of these identified significant differences are evident in the following graph (figure 6.14) where those who declared English to be their first language represent point 0.0\textsuperscript{26}. There are three noticeable patterns. First, Korean, Chinese and Vietnamese group together, obtaining the lowest scores between 1.39 and 1.56 of an IELTS band score below the outcomes of the English speakers on average. The second grouping comprises Austronesian and Indian speakers, who typically score 0.78 and 0.91 of an IELTS band score below English speakers respectively. The third grouping shows Indo Europeans and speakers of African languages, who score between 0.35 and 0.33 of a band score less than English speakers on average.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure6.14}
\caption{Posterior estimates for First language of linear regression (IELTS)}
\end{figure}

\textsuperscript{26} The intercept incorporates all of the baseline estimates so these are not shown in the graph
Academic group

Table 6.8 provides the posterior draws for Academic group, showing that AEL (Arts, Education, Law group) and SEET (Sciences, Engineering, Environment, Technology group) students scored significantly differently from one another, as did Health and SEET students (both numbers are greater than 0.9). The difference between Health and AEL students was possible but more questionable at 0.79. Referring back to the mean in Table 6.6, we see that SEET obtained higher scores on average ($M = 0.15$) than both Health ($M = -0.18$) and AEL students ($M = -0.06$).

Table 6.8

Posterior Draws for Academic Group (IELTS)

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>SEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEL</td>
<td>0.79</td>
<td>0.93</td>
</tr>
<tr>
<td>Health</td>
<td>-</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Notes: shading denoted highly statistically significant values

This pattern of outcomes is shown visually on the following graph, where GBS (Business) is the baseline and represents point 0.0.
We see in Table 6.9 that LOI (Language of Instruction), DEP (Direct Entry Program) and PP (Pathway Partner) participants all scored differently from one another. Referring back to the mean in Table 6.6, we see that LOI participants obtained marginally lower scores than Test (-0.18) but higher than both PP or DEP. PP scores were lower than both Test and LOI, and DEP were the lowest.
Table 6.9

Posterior Draws for Entry Pathway (IELTS)

<table>
<thead>
<tr>
<th></th>
<th>LOI</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP</td>
<td>0.99</td>
<td>0.94</td>
</tr>
<tr>
<td>LOI</td>
<td>-</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Notes: shading denoted highly statistically significant values

This pattern of outcomes is shown visually on the following graph, where Test represents point 0.0.

Figure 6.16. Posterior estimates for Entry pathway of linear regression (IELTS)
**Reason for taking the test**

In Table 6.10, differences between the reasons for taking the IELTS test at graduation are given. Further study differs from both Migration and Other reason. The means from Table 6.6 show that those taking the test for Further study obtained lower scores on average (-0.23) than those taking it for Migration (-0.04) or Other reasons (-0.03).

Table 6.10

*Posterior Draws for Reason for Taking the Test (IELTS)*

<table>
<thead>
<tr>
<th></th>
<th>Migration</th>
<th>Other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further study</td>
<td>0.90</td>
<td>0.99</td>
</tr>
<tr>
<td>Migration</td>
<td>-</td>
<td>0.77</td>
</tr>
</tbody>
</table>

*Notes: shading denoted highly statistically significant values*

This pattern of outcomes is shown visually below, where Employment in Australia represents point 0.0.
In summary, first language shows systematic variability among the identified variables in relation to IELTS Overall outcomes, as does Entry pathway, albeit to a lesser extent.

Finally, by looking back at the sigma values in the last row of Table 6.6, the amount of variation can be calculated and considered. By multiplying the sigma by three, the amount that this number varies either side of the mean can be calculated. The sigma of 0.65 multiplied by three gives 1.95. As this number is relative to the IELTS score range (i.e. 9), this shows wide of almost two bands either side of the mean. This means that these data can describe trends and tendencies, but are not suitable for predicting future student performance.

---

27 Because a normal distribution is taken to be within three standard deviations of the mean
6.3 Analysis of GPA outcomes

6.3.1 Preliminary plots of data

The above process was repeated for GPA outcomes. We test the relationship between GPA and the five variables of Gender, Academic group, aggregated First language group, Entry pathway and aggregated Reason for taking the test. The data of each of these variables is first graphed against the GPA score using boxplots for initial visual checking.

The boxplot of GPA by Gender in Figure 6.18 shows no visual difference between males and females in GPA outcomes.

![Boxplot of GPA by Gender](image)

*Figure 6.18. Boxplot of GPA by Gender*

As for IELTS outcomes, splitting Gender by First language showed some differences in figure 6.19, but not when split by other variables.
Some variability in GPA outcomes is also evident as shown in the boxplot of GPA by First language (figure 6.20) with African and Indian language speakers obtaining visibly lower scores than English and Indo European speakers on average.
Figure 6.20. Boxplot of GPA by First language

For the other variables of Academic group, Entry pathway, and Reason for taking the test, the boxplots in figures 6.21-6.23 show few differences visually. Each variable is further investigated through the linear regression in the next section.
Figure 6.21. Boxplot for GPA and Academic group

Figure 6.22. Boxplot for GPA and Entry pathway
6.3.2 Linear regression analysis for GPA

Linear regression was used to analyse the GPA outcomes in relation to the five variables. The regression model used was:

\[
\text{GPA} = \text{Intercept} + \text{Gender} + \text{First Language} + \text{Academic group} + \text{Entry pathway} + \text{Reason for test}
\]

Table 6.11 below shows the estimated coefficients of the linear regression along with the mean differences and 95% credible intervals (CI) for the model.
Table 6.11

*Coefficients of Linear Regression (GPA)*

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Mean</th>
<th>LCI</th>
<th>UCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>8.14</td>
<td>4.80</td>
<td>5.50</td>
</tr>
<tr>
<td>Females</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>-0.17</td>
<td>-0.31</td>
<td>-0.03</td>
</tr>
<tr>
<td>GBS</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>-0.41</td>
<td>-0.78</td>
<td>-0.04</td>
</tr>
<tr>
<td>Austronesia</td>
<td>-0.17</td>
<td>-0.61</td>
<td>0.29</td>
</tr>
<tr>
<td>Chinese</td>
<td>-0.27</td>
<td>-0.57</td>
<td>0.03</td>
</tr>
<tr>
<td>Indian</td>
<td>-0.52</td>
<td>-0.84</td>
<td>-0.19</td>
</tr>
<tr>
<td>Indo European</td>
<td>0.05</td>
<td>-0.30</td>
<td>0.42</td>
</tr>
<tr>
<td>Korean</td>
<td>-0.26</td>
<td>-0.60</td>
<td>0.08</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>-0.02</td>
<td>-0.42</td>
<td>0.38</td>
</tr>
<tr>
<td>AEL</td>
<td>0.07</td>
<td>-0.20</td>
<td>0.33</td>
</tr>
<tr>
<td>Health</td>
<td>0.05</td>
<td>-0.19</td>
<td>0.28</td>
</tr>
<tr>
<td>SEET</td>
<td>0.32</td>
<td>0.10</td>
<td>0.53</td>
</tr>
<tr>
<td>TEST</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEP</td>
<td>-0.32</td>
<td>-0.60</td>
<td>-0.04</td>
</tr>
<tr>
<td>LOI</td>
<td>-0.12</td>
<td>-0.31</td>
<td>0.08</td>
</tr>
<tr>
<td>PP</td>
<td>-0.22</td>
<td>-0.41</td>
<td>-0.03</td>
</tr>
<tr>
<td>Employment in Australia</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further study</td>
<td>-0.09</td>
<td>-0.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Migration</td>
<td>-0.11</td>
<td>-0.27</td>
<td>0.06</td>
</tr>
<tr>
<td>Other</td>
<td>0.14</td>
<td>-0.08</td>
<td>0.36</td>
</tr>
<tr>
<td>English</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sigma</td>
<td>0.74</td>
<td>0.70</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Notes: LCI = Lower Credible Interval; UCI = Higher Credible Interval.

The intercept incorporates all of the baseline estimates.

Statistically significant differences are shaded.
The first level (baseline) of each factor in the model is included in the intercept. Significant differences are shaded in the table and found to be as follows:

- **Gender:** males ($M = -0.17$) obtained lower GPAs on average than females but this difference was marginal and therefore of little practical significance.

- **First language:** the biggest difference in GPA compared to English speakers was for speakers of Indian languages, an average 0.51 of a GPA score lower; African language speakers also did worse than English speakers with GPAs of 0.41 lower on average. Other language groups saw no statistically significant difference to English speakers.

- **Academic group:** SEET ($M = 0.32$) obtained better GPAs than participants in GBS.

- **Entry pathway:** DEP ($M = -0.32$) and PP ($M = -0.22$) obtained lower GPAs than those who entered by Test.

- **Reason for taking the test:** no statistically significant differences were found for reasons when compared to Employment in Australia.

Differences within the variables were further explored. For each of the variables, the posterior draws are again taken from the Gibbs sampler. Where a significant difference is found, the mean from the coefficients of linear regression in Table 6.11 shows the magnitude of the mean difference between groups.

**Gender**

Gender has already been discussed. The mean difference between males and females for GPA outcomes was found to be of little practical significance.
First language

The posterior draws for First language in Table 6.12 below show numerous significant differences as shown by the shaded figures exceeding 0.9; several more are approaching 0.9.

Table 6.12

Posterior Draws for First Language (GPA)

<table>
<thead>
<tr>
<th></th>
<th>Austronesian</th>
<th>Chinese</th>
<th>Indian</th>
<th>Indo European</th>
<th>Korean</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>African</td>
<td>0.87</td>
<td>0.84</td>
<td>0.75</td>
<td>0.99</td>
<td>0.82</td>
<td>0.98</td>
</tr>
<tr>
<td>Austronesian</td>
<td>-</td>
<td>0.71</td>
<td>0.96</td>
<td>0.85</td>
<td>0.68</td>
<td>0.74</td>
</tr>
<tr>
<td>Chinese</td>
<td>-</td>
<td>-</td>
<td>0.98</td>
<td>0.99</td>
<td>0.55</td>
<td>0.95</td>
</tr>
<tr>
<td>Indian</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.99</td>
<td>0.97</td>
<td>0.99</td>
</tr>
<tr>
<td>Indo European</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.98</td>
<td>0.64</td>
</tr>
<tr>
<td>Korean</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.93</td>
</tr>
</tbody>
</table>

The table above and the means in Table 6.6 therefore provide evidence of the following statistically significant differences:

- Speakers of African languages obtained lower GPAs ($M = -0.41$) than Indo European ($M = 0.05$) and Vietnamese ($M = -0.02$)
- Speakers of Indian languages ($M = -0.52$) did worse than Austronesians ($M = -0.17$)
• Chinese obtained higher GPAs ($M = -0.27$) than Indians ($M = -0.52$) but lower than Indo Europeans ($M = 0.05$) and Vietnamese ($M = -0.02$)

• Speakers of Indian languages did worse than all identified language groups except speakers of African languages

• Indo European obtained higher GPAs ($M = 0.05$) than speakers of African languages ($M = -0.41$), Chinese ($M = -0.27$), Indians ($M = -0.51$) and Koreans ($M = -0.26$)

• Koreans did better than Indians and Indo European but worse than Vietnamese

• Vietnamese obtained higher GPAs than Austronesian but lower than Indo Europeans

These differences are evident on the following graph (figure 6.24) where those who declared English to be their first language represent point 0.0. What is evident from the graph is that, despite statistically significant differences, the groupings by first language are not the same as for IELTS outcomes (see figure 6.14). Different language groups scored well for GPA.
Table 6.13 shows the posterior drawers for Academic group. SEET participants scored significantly differently from both AEL and Health students and the mean scores in the coefficients table 6.11 indicate that SEET students did better on average than both of them. However, the means in Table 6.11 ($M = 0.05$ and $M = 0.07$ respectively) reveal the differences to be small and therefore of little practical significance except for those between SEET and GBS ($M = 0.32$).
Table 6.13

*Posterior Draws for Academic Group (GPA)*

<table>
<thead>
<tr>
<th>Health</th>
<th>SEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEL</td>
<td>0.55</td>
</tr>
<tr>
<td>Health</td>
<td>-</td>
</tr>
</tbody>
</table>

*Notes:* shading denoted highly statistically significant values

This pattern of outcomes is shown visually on the following graph, where GBS is the baseline and represents point 0.0. This pattern is similar to the IELTS outcomes.

![Graph showing posterior estimates for Academic group of linear regression (GPA)](image)

*Figure 6.25. Posterior estimates for Academic group of linear regression (GPA)*
**Entry pathway**

Table 6.14 shows the posterior draws for Entry pathway. LOI participants scored significantly differently from both Pathway Partner (PP) and DEP. The mean in Table 6.11 shows that LOI participants obtained marginally lower scores than Test \(M = -0.12\) but higher than both PP or DEP. Overall, PP were lower than both Test and LOI and DEP was the lowest.

Table 6.14

*Posterior Draws for Entry Pathway (GPA)*

<table>
<thead>
<tr>
<th></th>
<th>LOI</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP</td>
<td>0.94</td>
<td>0.78</td>
</tr>
<tr>
<td>LOI</td>
<td>-</td>
<td>0.90</td>
</tr>
</tbody>
</table>

*Notes: shading denoted highly statistically significant values*

This pattern of outcomes is shown visually on the following graph, where Test represents point 0.0. This pattern is consistent with the outcomes for the Entry pathway variable for IELTS.
Figure 6.26. Posterior estimates for Entry pathway of linear regression (GPA)

**Reason for taking the test**

Table 6.15 provides the posterior draws for Reason for taking the test. Those who took the test for Other reasons had different outcomes from those who took it for Migration or Further study. The mean scores in Table 6.11 show better outcomes by those taking the test for Other reasons ($M = 0.14$).

Table 6.15

*Posterior Draws for Reason for Taking the Test (GPA)*

<table>
<thead>
<tr>
<th>Reason</th>
<th>Migration</th>
<th>Other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Further study</td>
<td>0.55</td>
<td>0.98</td>
</tr>
<tr>
<td>Migration</td>
<td>-</td>
<td>0.99</td>
</tr>
</tbody>
</table>

*Notes:* shading denoted highly statistically significant values
This pattern of outcomes is shown visually on the following graph, where Employment in Australia represents point 0.0. However, the mean differences in Table 6.11 reveal that the differences were so small as to be of little practical significance.

![Diagram showing posterior estimates for Reason for test of linear regression (GPA)](image)

Figure 6.27. Posterior estimates for Reason for test of linear regression (GPA)

In summary, as for IELTS (Academic), first language was found to be the variable with the greatest systematic variability, followed by Entry pathway.

Finally, by looking back at the sigma values in the last row of Table 6.11, the amount of variation can be calculated and considered. The sigma of 0.74 multiplied by three gives 2.22 (out of a maximum of 7 on the GPA scale), which is a large variation, and shows even wider variability than for IELTS. This confirms that these data can describe trends and tendencies, but are not suitable for predicting future student performance.
6.4 Analysis of IELTS and GPA outcomes

In this section, both IELTS Overall and GPA outcomes are investigated together. First the correlation between these two dependent measures is considered and then multivariate linear regression is used to investigate whether there are variables that predict participant outcomes on both measures.

6.4.1 Correlation between IELTS Overall and GPA

Correlational analysis was run to test the association between IELTS (Overall and each macro skill) and GPA as shown in Table 6.16.

<table>
<thead>
<tr>
<th>Variable</th>
<th>GPA</th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
<th>Speaking</th>
<th>Overall IELTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>1</td>
<td>.39***</td>
<td>.41***</td>
<td>.32***</td>
<td>.19***</td>
<td>.38***</td>
</tr>
</tbody>
</table>

Note: ***p < .001

A moderate and highly statistically significant correlation was found GPA and IELTS Overall ($r = .38$). This degree of correlation makes it reasonable to run a multivariate linear regression with these two dependent variables. A weak to moderate correlation was also found between GPA and each macro skill on IELTS, with the strength of the correlation ranging from .19 to .41. The receptive skills (Reading and Listening) had the strongest association with GPA ($r = .41$ and .39 respectively), thereby accounting for around 16% each of the variance explained, while Writing accounted for around 9% ($r = .32$), and Speaking had the weakest association ($r = .19$), accounting for <4%. This correlation, along with the regression line, is
in the scatterplot below. As each participant is represented by a circle, the denser the pattern, the more common the respective combination of scores.

![Scatterplot of GPA and IELTS scores](image)

**Figure 6.28.** Correlation of GPA and IELTS showing low and high scorers

Also shaded on the scatterplot is the group of scorers who obtained ‘low’ scores on both IELTS and GPA in the bottom left, and the ‘high’ scorers on both measures in the top right. The low group shows the participants who scored ≤ IELTS 6.0 in combination with a GPA of ≤ 4.0, defined as unsuccessful on both measures in this study. The high group in the top right shows participants who scored ≥ IELTS 7.0 in combination with a GPA of ≥ 6.0, defined as highly successful on both measures in this study. As they are at the extremes of the scales, these two groups comprise small numbers of participants and most fall into the mid-range on both measures.

---

28 See Chapter 2 section 3.5.6 for the explanation of how these groupings were set.
Also of note are the other two corners of the rectangle where students score well on one measure but poorly on the other. Few participants with a low IELTS score obtained a high GPA; similarly, only a small number combined a high IELTS score with a low GPA score.

6.4.2 Multivariate linear regression for IELTS and GPA

Multivariate linear regression was used to combine the two measures. The regression model used was:

\[
\text{GPA, Overall IELTS} = \text{Intercept} + \text{Gender} + \text{First Language} + \text{Academic group} + \text{Entry pathway} + \text{Reason for test}
\]

Table 6.17 provides the coefficients and credible intervals for the multivariate regression of GPA and IELTS and for each variable.
Table 6.17

*Coefficients and Credible Intervals for Multivariate Regression of GPA and IELTS*

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>GPA LCI</th>
<th>GPA UCI</th>
<th>IELTS LCI</th>
<th>IELTS UCI</th>
<th>IELTS LCI</th>
<th>IELTS UCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.15</td>
<td>4.18</td>
<td>5.49</td>
<td>8.13</td>
<td>7.82</td>
<td>8.43</td>
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<td>-0.32</td>
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<td>-0.77</td>
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<td>0.03</td>
<td>-1.44</td>
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</tr>
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<td>0.016</td>
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<td>-0.17</td>
<td>-0.34</td>
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</tr>
<tr>
<td>PP</td>
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<td>-0.41</td>
<td>-0.03</td>
<td>-0.40</td>
<td>-0.56</td>
<td>-0.23</td>
</tr>
</tbody>
</table>
Further study | -0.10 | -0.29 | 0.10 | -0.23 | -0.41 | -0.06
--- | --- | --- | --- | --- | --- | ---
Migration | -0.11 | -0.27 | 0.06 | -0.04 | -0.18 | 0.10
Other | 0.14 | -0.08 | 0.36 | 0.03 | -0.17 | 0.23
Sigma | 0.56 | 0.50 | 0.63 | 0.46 | 0.41 | 0.52

*Note: LCI = Lower Credible Interval; UCI = Higher Credible Interval*

The intercept incorporates all of the baseline estimates

Using the above table, the means of both dependent variables (GPA and IELTS Overall) can be compared. Remembering that where zero is contained between the lower and higher credible intervals, there is not a statistically significant effect, the significant findings can be summarised as follows:

- **Gender**: differences were found between males and females on both measures, but these are so small as to be of little meaningful significance in practice.

- **First language**: there were generally different outcomes for GPA compared to IELTS. Speakers of African languages tended to score worse on GPA but not IELTS. Chinese, Korean and Vietnamese participants scored worse on IELTS but not GPA. Indian speakers were the only group to score significantly lower than English speakers on both measures. This may go some way to explaining why the correlation between these two measures shown in figure 6.21 (consistent with previous research – see Davies, 2008) is only moderate.

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As we lose some power when combining both measures, there are small differences in the coefficients and credible intervals compared to Tables 6.6 and 6.11 where the variables were treated separately.
• Academic group: differences were small except between GBS and SEET participants for GPA.

• Entry pathway: PP and DEP tended to do worse than other Entry pathways for both IELTS and GPA.

• Reason for taking the test: no differences were found except for small differences for IELTS outcomes and Further study.

6.5 Discussion

This part of the study was interested in the graduating outcomes of undergraduate EAL students as measured by IELTS (Academic) and GPA, and whether there was any systematic variability relative to the variables of gender, first language academic group, entry pathway, or reason for taking the test. Each of the RQs is considered in turn and matters arising from the findings are then discussed at the end of the chapter.

6.5.1 The graduating outcomes of undergraduate EAL students

This section returns to RQ 2.1:

2.1 What are the graduating outcomes of undergraduate international students (as measured by IELTS (Academic) and GPA)?

IELTS (Academic) outcomes

The most common IELTS Overall score at graduation was 6.5, though scores were found to be widely distributed. Outcomes by macro skill showed the highest scores to be in Listening and the lowest in Writing on average. Over third scored in the ‘good user’ or above range, but the same number exiting scores that were at or below the requisite minimum to enter their
undergraduate degree program, which is particularly concerning. Fourteen
the sixteen lowest scorers in this study had plans for migration, employment
in Australia or further study. The fact that they applied for the test suggests
that they may not be fully cognisant of their actual linguistic proficiency or
how such low levels might impact their future, and this has implications for
messaging to students.

Low scorers are arguably of greatest concern. The fact that 15% of
participants in this study were below the minimum English language level
required to commence their degree at the point of graduation surely warrants
concern, as does the further 23% who were still at the minimum level. It is
not clear whether they were at the threshold level required at the point of
entry or whether attrition occurred during the degree because not all
participants had taken IELTS for entry. However, it raises concerns over
actual (versus published) entry levels, and linguistic improvement during
degrees. The linguistic level required to enter any institution is set on the
assumption that this is the minimum required to be successful, so the
question is how academic progression is occurring with weak linguistic
competence. Patterns of low scorers are clearly worthy of institutional
concern and monitoring.

Of particular interest were the scores of those who had entered the
via IELTS and for whom score gain between entry and exit could be
determined. Almost two thirds of participants who had entered by IELTS
improved their score by exit, while a quarter attained the same score as they
had at entry. When pre/post scores of this subcohort were compared, there
was less than half a band score improvement on average from entry to exit
(0.38). This means that while language acquisition is more likely than not
across an undergraduate program, it is not guaranteed to occur and is likely
be a small increment. It also suggests that individual language acquisition is
likely to be relative to the commencing level of the individual rather than a
desired absolute standard. Those most likely to experience a decrease in
proficiency were the participants with the lowest scores at entry, while high
scorers were less likely to experience a decrease. This is consistent with the findings of other score gain studies (Craven, 2012; Green, 2004; & Arkoudis, 2009) and has implications for institutions in terms of supporting the academic language development of EAL students. It reminds us that stakeholders need to have realistic expectations of the amount of language acquisition that might occur during degrees, as noted by Craven (2012). It also draws attention to the notion of the plateau level of ELP at around the IELTS 6.0-6.5 beyond which it is harder to progress (Craven, 2012; Elder & O’Loughlin, 2003; Humphreys & Mousavi, 2010; & Arkoudis, 2009). As Briguglio (2011) noted, reaching an IELTS 7.0 does not happen naturally but “requires extra and sustained measures” (p.321), while Green (2004) commented that improvements do not occur equally at band levels. It should be noted, however, that backward shift could be attributable to factors other than attrition: the student may have been on the cusp of the score attained at entry, may have had a ‘bad day’, and small changes (e.g. half a band score) can be attributable to test-retest reliability rather than attrition.

The test scores obtained by the small number of focus group participants from Part 1 of this study confirmed that there is no guarantee that students will graduate with ELP scores that are higher than are required to enter the degree. Also consistent with the findings from the larger cohort, an overall score of 6.5 was the most common exiting score for this group, which again evidences the challenge that students experience to reach the level of ‘good user’, even when they have clear motivation to do so such as for migration and professional registration in Australia. This was the case even for students who evidenced high levels of motivation during the focus group discussions.

**GPA outcomes**

The mean GPA was 4.67 but, similar to the IELTS outcomes, a wide range scores were obtained on the GPA measure, mirroring institutional outcomes.
of all undergraduate students. Although many participants did well, it is unclear how some were able to graduate with such low GPAs, though that is not the focus of this study. Patterns of GPA outcomes are further discussed 6.5.2.

IELTS (Academic) and GPA outcomes combined

There was a moderate correlation ($r = 0.38$) between IELTS Overall scores and GPA, with the strongest correlation being between GPA and the receptive skills. This is consistent with previous research (Davies, 2008). It was found to be possible but highly unlikely for a student to do well academically with poor linguistic outcomes and vice versa. This is consistent with the literature, which emphasises the key role of first language on academic success, noting that language is a key enabler, though not a guarantee of success, and that only a portion of the variance can be explained by ELP (Criper & Davies, 1988; Phakiti, 2008; Phakiti et al., 2013; Sawir et al., 2012; Ushioda & Harsch, 2011; Xu, 1991; Yang, Noels, & Saumure, 2006, Yeh & Inose, 2003). The findings suggest that other variables play a role in such outcomes and this is discussed further in section 6.5.3.

6.5.2 Systematic variability in EAL students’ outcomes

This section returns to RQ 2.2:

2.2 Is there any systematic variability in outcomes correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or reason for taking the IELTS test?

IELTS (Academic) Outcomes

A negligible difference in IELTS outcomes was seen relative to Gender. First language was the variable with the largest differences in IELTS outcomes, and with the most evident systematic variability. Significant differences were
observed between many language groups. Vietnamese, Chinese and Koreans typically obtained lower scores than the other language groups. Austronesian and Indian speakers obtained higher scores than the latter groups, while Indo Europeans and speakers of African languages obtained the highest scores along with those who declared English to be their first language. First language is, of course, a contested notion due to numerous factors including personal identity, national policies, and complexities related to multi- or poly-lingualism (Kirkpatrick, 2010a, 2010b; Kirkpatrick & Sussex, 2012). However, it is not surprising that speakers of African and Austronesian languages scored well because their countries of origin have used English as a *lingua franca* for many decades and EMI is common. It was perhaps surprising that speakers of Indian languages, therefore, did not, given their colonial history. Chinese and Korean speakers are less likely to have experienced the advantage of English as a *lingua franca* or an EMI context, coming from ‘periphery’ countries where English has been used as a ‘foreign’ language in the traditional sense (Kachru, 1982; Pennycook, 2004; Phillipson, 2009a). They are also languages with a wide typological distance from English, which has been found to impact acquisition and outcomes (Bridgeman et al., 2015; Chan & Sylva, 2014; Gu, 2013; Li, Chen, & Duanmu, 2001; Skehan, 2008). It is also consistent with the current English proficiency index for each of these countries (EF, 2014), in which China and Vietnam rank within the low proficiency grouping, and Korea and India rank as moderate. This suggests that more time and support may be required for speakers of such languages to improve linguistically, reminiscent of the acquisition rates identified for EAL children to acquire CALP (Cummins, 1984, 2000; Greenberg Motamedi, 2015).

Academic group (i.e. broad discipline) had statistically significant outcomes on this measure and SEET students obtained the highest average IELTS scores. However, mean differences were small and this variable was therefore not considered to show systematic variability overall.
Entry pathway showed significant differences between groups on this measure. It was found that students who entered via pathway programs were more likely to obtain lower language scores at graduation than those entering via LOI or Test. This is not surprising, however, since those who utilise pathway programs such as PP and DEP do so for the alternative articulation opportunities provided to students who have not met the conditions (academic and/or linguistic) for entry directly to a university program. By commencement of the degree program, pathway students are expected to be at the minimum level but, given typical language improvement rates, they are unlikely to exceed it, and they therefore may start on average at a lower level than the LOI or Test cohorts. In contrast to pathway programs, those who enter by LOI are expected to have strong language skills, which is why they have been allowed to enter without further evidencing their linguistic skills. Those entering by Test also have a minimum standard to evidence in order to be granted admission; ergo the average score obtained will exceed the published minimum. Dealing with such differentiated commencing proficiency is a fact that all institutions must grapple with. It is perhaps reassuring that, on average, EAL students who had not studied in an EMI context prior to their undergraduate study were only around half a band score below those who did have this advantage.

IELTS Overall scores also differed according to the Reason for taking the IELTS exit test, with those taking it for Employment in Australia most to score well and those taking it for Migration scoring significantly higher than those taking it for Further study. This may be because the reason for taking the test is a great motivator, or it may be because a different profile of student plans to migrate or gain employment in Australia compared to those who continue with their studies or who take the test for other reasons. This cannot be determined from this dataset but the literature suggests that motivation is a key factor (Avdi, 2011; Cotton & Conrow, 1998; Craven, 2012; Elder & O’Loughlin, 2003; Ingram & Bayliss, 2007; Kerstjen &
GPA outcomes

Only small differences in academic outcomes were found for three of the five variables (Gender, Academic group and Reason for taking the test), and these were too small to be of any practical significance. Females performed marginally better than males, consistent with the wider literature which indicates that gender affects academic outcomes and that females obtain higher GPAs than males on average, whether they are international or domestic students (Olsen, 2013a). Only one small significant difference was found for GPA based on Academic group. This is arguably a positive finding as it would be hoped that different discipline areas within the University would have similar outcomes in terms of average GPA. It could be that grades are impacted by normative grading, soft marking, or grade inflation rather than being strictly criterion-based (despite institutional policy that would indicate the contrary), but it is outside of the scope of this study to discuss or confirm such matters. Reason for taking the test also showed negligible differences for GPA outcomes, as might be expected, since GPA is likely to be unrelated to the reason for taking a language test at graduation.

Entry pathway showed some systematic variability on this measure. On average, students who entered via pathway programs (PP and DEP) did not do as well academically as those who entered by Test. This is also with the literature which suggests that standardised language proficiency provide the best evidence for potential academic success (Oliver, et al., 2012). It also matches the findings of other research commissioned by the research site, which showed that the lowest performing students by pathway were students articulating from Technical and Further Education institutes (TAFE) (Olsen, 2013b). However, these differences, while
statistically significant, were relatively small (0.22 and 0.32 of a GPA) and should therefore not be overstated.

First language showed an unexpected pattern. No statistically significant differences were found between many language groups, including those who obtained the lowest language scores (Chinese, Korean, Vietnamese) compared to English speakers. As alleged by some researchers, this may be due to soft marking and the effect of large cohorts of international students on cohort outcomes buoying grade outcomes (Foster, 2012; Trounson, 2011), but it is outside of the scope of this study to comment and grades in this study have been taken at face value. On the other hand, speakers of Indian and African languages attained significantly lower GPAs than the other language groups \( (M = -0.51 \text{ and } -0.41 \text{ respectively}) \). The finding indicates that, while it is hard to do well with poor language competence, stronger languages skills do not guarantee academic success.

**IELTS (Academic) and GPA outcomes combined**

It appears that there is some systematic variability in relation to the combined outcomes. First language was found to be important. Indian speakers tended to obtain lower scores on both measures. For other groups, the pattern was almost the opposite for IELTS compared to GPA: Chinese, Korean and Vietnamese clustered together as the lowest scorers on average for IELTS but saw no statistically significant difference from English speakers and other high scorers for GPA. In contrast, speakers of African languages were among the lowest on average for GPA but were likely to score well on IELTS. This finding suggests that institutions might target support to ensure it is effective.

Entry pathway was also found to show systematic variability, though to a lesser extent than First language. Those entering via pathway courses scored
less well on both measures than those who entered by Test or LOI. Gender, Academic group, and Reason for test showed small differences. However, it must be noted that the study shows tendencies and effects and that we be wary of attempting to predict future student outcomes from these

Large cohorts are of particular interest because they impact average institutional outcomes and therefore, potentially, reputation. In this institution and dataset, large cohorts included speakers of Chinese languages and Indian languages and so they are worthy of specific consideration. The results showed that Chinese students tended to score below average on IELTS (Academic) while speakers of Indian languages tended to score below average on GPA and IELTS. Rather than stereotyping particular groups, however, higher education institutions should consider this from a marketing and risk management perspective. Consideration might be given to articulation agreements on- and off-shore and with pathway providers and progression to university programs from these markets. Patterns of outcomes by institution, geographical area, or agent, for example, may be worth further institutional investigating, and it suggests that longitudinal patterns of performance should be tracked using various sources of evidence as recommended by the GPPs and ELSHE (see section 1.3.3), and that the focus needs to shift from quantity to quality in order to lead to improved student outcomes.

Language as an intervening variable

This study identified the importance of language to academic success and key role that first language plays. This raises the issue of whether language in fact an independent variable, as it was treated in this study, or indeed an intervening variable in academic success. For bilingual children, Cummins (1986, 2000) and Cummins and Swain (1983) have long maintained that language is an intervening variable that mediates academic development in
children rather than an autonomous causal variable, because it is not independent of the sociocultural context where learning occurs. In adult learners, too, first language might be mediating or masking other variables an aspect of within-group homogeneity which these language users share. This is considered in the next section.

**Beyond the defined variables**

It is likely that individual differences account for a portion of the variability in the outcomes as noted in the literature review in Chapter 2. In the current study, students taking the IELTS test for employment in Australia and migration were found to do better than those taking the test for further study, for example, and this might be due to the motivation or agency to do well for a specific purpose driven by intrinsic motivation (see section 3.9.2). External factors might also impact outcomes such as differences in learning culture. Previous learning culture, for example, is a commonality that each first language group in this study shares, which it may be masked by the variable of first language.

Socioeconomic background may also be a factor. Research on US children has shown that the home environment, such as parental education level and family income, play a role in student performance (Bailey & 2007; Chamot, 2009; Chan & Sylva, 2014; Cummins, 2000; Greenberg Motamedi, 2015; Storch & Whitehurst, 2001). Institutionally, at the University in this study, first-in-family status and socioeconomic status (SES) are considered to be potential triggers for academic risk in relation to domestic students, yet this data is not collected for international students. Understandably, SES (and the notion of social capital) is challenging to define and measure, especially cross-culturally. Certainly, it is unlikely that any fee-paying student would be coming from backgrounds of *extreme* poverty, though SES might yield some interesting findings if it were
to meaningfully operationalise. First-in-family status would be easy to track and might generate findings that are worthy of interest in relation to outcomes.

Several studies have argued that internal and external factors have a combined impact on language acquisition during degrees and on academic success, generally due to interactions between these variables and also to the multifaceted nature of each construct (see section 3.9.3). The interrelationships between these predictors are complex and causation cannot be easily attributed but they may impact outcomes.

Finally, it should again be acknowledged that the instrument used in this study (IELTS) is not a perfect proxy for linguistic outcomes. Some aspects of language use may therefore not be fully accounted for, as occasionally suggested by the participants.

6.6 Conclusion

This study confirmed that a highly successful student also needs highly developed linguistic skills. It was also found, however, that strong language skills alone do not ensure strong outcomes because language functions as an ‘enabler’ but not a guarantee of academic success. Thus, while some are graduating with poor language outcomes as measured by IELTS (Academic), it is very unlikely that such students will do well academically their language skills are poor. It is also clear that some students are far from the requirements for graduate skilled migration applications, further study or for meeting employer expectations of graduates’ language skills. This raises the question of what makes a student truly successful and where they might be ‘beating the system’ in that they have managed to graduate but, in some
cases, not gained competence in the language in which their studies were undertaken. It suggests that institutions should monitor longitudinal patterns of performance and consider how to deal with such issues.

These findings confirmed that the greatest systematic variability on both outcome measures was related to First language, and to Entry pathway to a lesser extent. The statistical methods used to analyse the data revealed tendencies and trends but also confirmed that these patterns should not be used to make predictions about future student performance. Indeed, despite strong patterns emerging with respect to some variables, we should beware of stereotyping and over-generalising about certain groups of students since graduate outcomes may be related to a complex network of additional variables. This suggests that EAL students should not be treated as one homogenous group but that cohort research and differentiated support would be more appropriate. The trends identified in this study might therefore be further tracked and used to inform institutions regarding how best to target differentiated interventions for higher-risk groups. Academic literacies initiatives might be most appropriate for EAL students from African and Indian backgrounds, while concurrent support initiatives more focused on academic language might be targeted largely at EAL students from language backgrounds more distant from English such as Chinese, Vietnamese and Koreans as well as Indian speakers. In this way, institutions might ensure that AELP, critical for academic success, is supported at the point of need.
Chapter 7: Discussion

7.1 Revisiting the research questions

This study set out to address three primary and three secondary research questions. In Chapters 4 and 5 we investigated student conceptualisations of the construct of ELP in higher education to address the following:

1.1 How do undergraduate international EAL students conceptualise ELP within higher education?
1.2 Is there any systematic variability in conceptualisations correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or stage of degree?

As discussed at the end of Chapter 5, considerable consensus was reported between the conceptualisations of the focus group participants and survey respondents. Of key interest was the finding that students considered AELP to play a key role in their academic success. Perceived challenges were found to vary by L1 and the typological distance from English, though the role of individual differences was also noted. A critical finding was the view that responsibility for developing AELP resided largely with students, and they reported being motivated to improve it. Stage of degree was found to have an effect on motivation levels, with first and penultimate/final semester identified as critical periods.

In Chapter 6, graduating outcomes measured by GPA and IELTS (Academic) were used to investigate principle research question 2 and its related secondary question:

2.1 What are the graduating outcomes of undergraduate international EAL students (as measured by IELTS (Academic) and GPA)?
2.2 Is there any systematic variability in outcomes correlating with the variables of gender, first language, academic group (i.e. discipline), entry pathway to the University, or reason for taking the IELTS test?
There was a wide range of scores at graduation on both measures. The most common exiting score was IELTS 6.5, and score gain, where it could be calculated, was relatively small. A number of those tested had graduated with test scores below the minimum entry level and almost a further quarter were still at the minimum entry level at graduation. It was found that a student was unlikely to do well academically with poor language skills but that stronger English did not necessarily guarantee academic success. Although student outcomes are likely to be impacted by a complex network of variables including motivation and individual differences, First language emerged as key predictor variable and showed the greatest systematic variability. Chinese, Korean, Vietnamese and Indian students tended to obtain statistically significantly lower scores on IELTS than other language groups, and speakers of African and Indian languages obtained lower GPAs on average.

The current chapter focuses on the third and final set of research questions, which consider the degree to which there was convergence or divergence of the findings:

3.1 To what extent, and in what ways, do undergraduate EAL student conceptualisations converge with the measurable outcomes of ELP?

3.2 To what extent, and in what ways, do conceptualisations and measurable outcomes converge with the policy discourse or existing frameworks of ELP?

Section 7.2 addresses the first of these questions by integrating the findings of the conceptualisations and outcomes phases of the study. Sections 7.3 and 7.4 return to the second research question and consider the findings in the light of the policy discourse as well as the literature. In section 7.5, a heuristic model is provided to illustrate a more nuanced understanding of the complex construct of ELP in the higher education context by drawing on the findings.
of the study, seminal theories and current models. Finally, Section 7.6 provides a summary of the key recommendations from the study, and suggestions for further research.

7.2 Integrating the findings: conceptualisations and outcomes

Typical of a mixed methods design, this section integrates the findings of the conceptualisations investigated in Parts 1 and 2 with the measurable outcomes identified in Part 3, as shown in figure 7.1.

![Figure 7.1. Integrating the conceptualisations and outcomes](image)

Convergence or divergence between these phases will be considered by theme along with the implications of each.

7.2.1 Challenges by macro skill

The multiple components of ELP can be fractured and described in various ways, as discussed in Chapter 2. Certainly, a view of language that is limited to competence by macro skill is an overly simplistic and reductionist view of its inherent complexity; however, the IELTS test reports scores by macro skill (as well as an overall average), and participants themselves predominantly
utilised these terms to describe their perceived linguistic strengths and weaknesses. For this reason, the convergence (or otherwise) between student conceptualisations of ELP and proficiency test outcomes by macro skill is a logical starting point for examining perceived challenges.

This study found that students were relatively accurate in their perceptions of the key challenges by macro skill in relation to IELTS test score outcomes. For example, focus group and survey respondents predominantly noted the writing skill to be their greatest weakness and listening the least problematic and these perceptions were corroborated in the test data: the lowest mean and median scores were found in the Writing test while the highest were in the Listening test. Challenges with the listening skill were perceived to be overcome relatively quickly during the student sojourn, and were typically restricted to grappling with new/varied accents, and/or in informal contexts as opposed to more formal university settings.

There was not a perfect match, however, between test outcomes and perceptions of challenge by macro skill. Speaking was reported as a major challenge, for example, yet this was not borne out in the test data: this skill had the second strongest mean scores, though with the widest standard deviation, meaning that there was wide variability in outcomes. One reason for this divergence may be due to the kinds of interactions students cited as challenging. Reference was made to a wide variety of real life uses and users, for example, including speaking and listening in informal contexts, with people in the community, domestic peers, and during workplace placements. These types of interaction, noted by students as memorable critical incidents, are not typically tested (and possibly not easily testable) in standardised proficiency tests. Some students commented that the IELTS test had not helped them transition to university because of this mismatch between the test and real life language use. Although there are practical constraints on test content that might preclude this to a certain extent, test owners would do well to consider how to replicate the interactions encountered by students in order
to maximise the content validity of their tests. One simple solution, for example, would be to utilise non-Anglophone and non-native speaker accents in the listening component of tests (Jenkins, 2014), a relatively easy change to enact. Other examples might include utilising common text types such as email rather than letters in the Writing test, and considering how to test intercultural communication in community, study and/or workplace contexts in the Listening or Speaking tests. Research should continually be undertaken to maximise authenticity for the real life domain that the test purports to target, while accepting that measuring sociolinguistic phenomena will always be challenging, and that a certain degree of artificiality in testing will always exist, because, as Perren (1967) famously declared, a test is not a tea party.

In relation to outcomes by macro skills, then, the triangulated data provides both qualitative and quantitative evidence that students and institutions should concentrate their efforts on developing writing skills. This finding is consistent with other studies on exit testing (Craven, 2012; Knoch et al., 2014; Knoch et al., 2015; O’Loughlin & Arkoudis, 2009, Storch & Hill, 2009), and in the academic language and learning literature more generally (Arkoudis & Tran, 2007; Lillis, 2001; Mort & Drury, 2012; Ransom, 2009; Ushioda & Harsch, 2011) and will be no surprise to experts in the field. What is of particular interest in this study, though, is the finding that students are aware - and relatively accurate in their perceptions - of their linguistic strengths and weaknesses in the university setting, at least in terms of the macro skills. This recognition is a crucial first step to acting upon an identified need.

Although less critical than writing enhancement, support in the critical transition to university with regard to familiarity of different accents in English, understanding the local vernacular, and managing interactions with locals and peers in informal contexts also warrant consideration. This is an area that is generally not supported by institutions, perhaps because it is considered extraneous to core business and therefore not highly valued, but it
leaves students vulnerable at a critical juncture of their studies. Common sense, as well as the literature on motivational theory (Clement, Dornyei et al., 1994; Clement, Noels et al., 2001; Dornyei et al., 2015), suggests that initial positive experiences build confidence and smooth the transition, reducing the chances of students withdrawing into homogenous linguistic peer groups and/or avoiding interactions in English (Arkoudis, Baik, Borland, Chang, Lang, Lang, Pearce & Watty, 2010; Eisenchlas & Trevaskes, 2007; Sawir, Marginson, Deumert, Nyland & Ramia, 2008).

7.2.2 The role of First language

This study found systematic variability based on L1 with respect to both conceptualisations and outcomes. Rather unexpectedly, perceptions of challenge with AELP were found to be related to first language background in the survey: the greater the typological distance between English and their first language (Chan & Sylva, 2014; Gu, 2013; Skehan, 2008), the greater the perceived challenge. Speakers of languages more distant from English also reported greater motivation to improve AELP and more responsibility for doing so. Conversely, those most familiar with English reported being the least motivated and the least responsibility to improve their language further. In the test score data, too, first language was the variable evidencing the greatest systematic variability in outcomes, along with entry pathway to a lesser extent. Chinese, Korean, Vietnamese speakers and others with wide typological distance from English were more likely to obtain statistically significantly lower scores on IELTS; cognate language speakers and those who come from non-Anglophone countries where English is used as a lingua franca, on the other hand, tended to obtain higher linguistic outcomes. Speakers of African languages, for example, tended to score well linguistically but not academically. The exception to this pattern was speakers of Indian languages, who tended to obtain lower scores on average for both GPA and IELTS.
The implication is that those from language backgrounds with the greatest distance from English are likely to benefit from in-degree language support interventions while those from backgrounds where African and Indian languages are spoken are likely to benefit from academic literacy interventions. It is, in fact, reassuring that students have realistic conceptions of the increased difficulty based on their L1 as this may result in improved uptake. However, we must be wary of stereotyping, and be cognisant of individual variability. The statistical findings of this study showed that even predicting group effects can be challenging and should not be used to predict future student performance. To over-attribute challenges to first language would do a disservice to our students. This requires a fundamental shift in stance from a view that all Chinese EAL students, for example, struggle in an EMI higher education context, to a view that Chinese students are likely to face a higher degree of challenge. L1 should be seen as one legitimate indicator of linguistic challenge among a range of factors. Institutions should therefore support those most in need while eschewing automatic (and potentially erroneous) assumptions which categorise entire groups of students based on their language background.

7.2.3 The role of motivation, personal agency and self-efficacy

Despite acknowledging the critical role of motivation on language learning (indeed, all learning), this study did not begin with the a priori expectation that motivation and related constructs would emerge as such a dominant theme. Yet, the role of motivation/personal agency/self-efficacy emerged as key themes in this study. The broad topic of motivation received more comments than any other, even though it was not introduced as a topic by the researcher. Motivation to improve was perceived as stemming from the individual, and students reported being motivated most of all by their future goals. This was further explored in the survey, where motivation, agency and self-efficacy emerged as dominant themes in the factor analysis. The majority of respondents agreed that motivation to improve their language came from themselves and they reported being motivated to improve. Acknowledging
responsibility for linguistic improvement is a key first step because agency can lead to purposeful action (Davies, 1990; Kettle, 2005; O’Loughlin & Arkoudis, 2009).

One of the most interesting findings in this study was related to fluctuating levels of motivation during degrees. First and penultimate semesters were identified as the periods in undergraduate study when students reported being the most challenged and also the most motivated to improve. First semester is an accepted critical transition point; several journals concentrate exclusively on commencing university students, for example. Penultimate semester, however, was not predictable or predicted a priori to be a receptive stage in undergraduate degrees. It indicates that students are likely to be most receptive to messaging and enhancement initiatives at these critical times. Since research shows that students find it difficult to sustain motivation throughout their degree (Oliver, Dooey et al. 2012), it makes sense to utilise these periods of reportedly higher motivation levels.

In the test score data, the role of motivation is less evident because quantitative test scores do not evidence motivation per se. However, a few comments can be made. Firstly, it must be remembered that all of the candidates had taken the IELTS test by choice and for real purposes, not simply as volunteers for research (as is the case for the exit testing research to date). Therefore, it could be argued that all candidates were intrinsically motivated to do as well as possible. It was found that those accessing the test for employment in Australia and migration (and therefore, presumably, with stronger short-term intrinsic motivation) scored better on average than those taking it for further study. The reason for this correlation cannot be fully accounted for; indeed, it may be that students who seek to live and work in Australia after graduation are inherently distinct from other exit test-takers. But it might be suggested that, where ELP is highly valued at graduation, students will make an effort to improve it, and the most obvious way to motivate students would be to link it to their future goals.
The implications of this are clear. Institutions should capitalise on existing student motivation by messaging around future goals. Crucially, the findings indicate that enhancement should be offered at the times students are most receptive; that is, early intervention, along with preparation for transitioning to post-graduation employment or further study from penultimate semester. It is also of interest that this coincides with the time when students perceive the greatest challenge with AELP, which indicates that first semester is a critical period in the student lifecycle to take advantage of. However, it was not within the scope of this study to ascertain whether students would actually exercise this agency for improvement, which may mean that institutions face the more challenging task of encouraging students to action their perceived responsibility and desire to improve. As O’Loughlin & Arkoudis (2009) state, “student agency is both shaped and constrained by the institutional practices of the university” (p.41). Therefore, institutions need to implement practices that explicitly value ELP and provide in-program intrinsic motivation for positive washback on teaching and learning.

### 7.2.4 The role of other variables

Numerous variables were investigated in this study but not all of them were found to be statistically significant. It is perhaps reassuring that gender and academic discipline were not found to be predictors and that entry pathway and post-graduation plans had only a limited impact; such findings can prevent inaccurate and over-generalised views about international EAL students. As noted previously, the role of each variable cannot simply be aggregated to provide a neat and summative explanation. This means that non-summative variability most likely plays a role through the interaction effects of other variables such as motivation and personal agency, as discussed in the previous section, along with a complex interplay of the *intraindividual* and *interindividual* differences discussed in Chapter 2 (Bailey & Butler, 2007; Bridgeman et al., 2015; Chamot, 2009; Cotton & Conrow, 1998; Cummins, 2000; Dornyei, 2015; Gregersen & MacIntyre, 2014; Larsen-Freeman, 1997; Phakiti et al., 2013; Rochecouste et al., 2010; Storch...
This complexity should be acknowledged and communicated to stakeholders to avoid treating the EAL international cohort as a single undifferentiated mass but rather as individuals with tendencies for increased challenges depending on their L1 in particular.

7.2.5 Improvement in ELP during undergraduate degree studies

A critical finding from Part 3 is that language acquisition is likely to be modest at best, and is not guaranteed to occur even over the course of an undergraduate program. The test outcomes revealed wide variability in overall exit scores but with the most common score being IELTS 6.5. A few candidates obtained exit scores below the requisite entry threshold, though we cannot be sure (due to non-test entry pathways) if this is evidence of attrition or as a result of entering below the published level. Where pre/post improvement could be measured, the majority saw modest gains - less than half a band score on average. Several low scorers were far from their desired score, despite having a reason to do well. Even students who displayed high levels of motivation in the focus group discussions did not necessarily obtain high scores. Such modest score gains are consistent with other studies which utilise general academic proficiency tests, regardless of whether it was after one semester (Humphreys et al., 2012; Storch & Hill, 2008), one year (Knoch et al., 2014), or a three-year undergraduate program (Craven, 2012; Knoch et al., 2015).

The focus group and survey respondents also accepted that it is possible not to improve ELP during their degree, and reported that some students did not care about improving it. They were also of the view that personal effort is needed for acquisition to occur. However, most students underestimated how much improvement would be made and there was a general mismatch in the degree of improvement between actual and perceived ELP by exit. Retrospectively, many reflected that their commencing ELP had not been at an adequate standard for study, but the vast majority reported a perceived improvement in their ELP. The test score data did not bear this out. On the positive side,
students are indicating a perception of being better able to cope after initial experiences at entry. Also positive is that, in theory, most students surveyed claim to accept responsibility for improving their ELP, and recognise that they need to make an effort to do so. However, it also suggests that they are not acting on this belief. Few in the focus groups were able to cite strategies they used to develop their language, and some students assumed that acquisition would take care of itself as a result of immersion, time or practice. Such erroneous beliefs may be impacting ELP improvement, or students may not know how to put their beliefs into action. Either way, this study (and others) provide plentiful evidence that students are demonstrably not making great strides in their language proficiency over the course of their degree, despite their expectations or beliefs, and many are not graduating with desired levels. These findings underline the challenges of improving AELP, and confirm that some students are far from their desired goals. It is concerning that students appear not to be fully cognisant of the likely improvement to be made over the course of the degree and tend to have higher expectations of graduating ELP levels than the reality.

The implication of this limited improvement is that institutions should carefully consider the setting of entry levels to ensure students can cope at all stages of the degree. Although we should not rely solely on entry levels, we know that only modest improvement occurs during degrees, so it makes sense to ensure students commence with adequate competence or we set them up to fail. Students commencing with low proficiency are likely to encounter increasing challenges as the gap widens between them and their more competent peers (Crawford & Wang, 2015). Raising entry standards, however, is not adequate for ensuring high proficiency by exit or to guarantee improvement, so institutions should not rely on a single policy change to expect major impacts on ELP. This is especially true in Australia where large numbers of students enter institutions via non-test pathways as noted in Chapter 1. Additionally, then, it suggests that institutions need to educate students about the challenges of developing ELP and of reaching desired
goals beyond graduation. From early in their studies, students should be made aware of the value that employers place on ELP, the key role of agency and motivation, and the fact that ELP does not develop by osmosis (Rochecouste et al., 2010). Students need specific direction in effective practices for language development. Institutions also need to deal with the fact that students’ language might not develop during the course of an undergraduate program. Clearly, the University’s reputation is at stake if students are graduating without the requisite (and claimed) skills listed in the graduate attributes, and this suggests that enhancement mechanisms should be offered at specific junctures to encourage students to act on their in-principle beliefs.

7.2.6 The importance of ELP for academic success and beyond graduation

One of the most critical findings of this study was the confirmation of the importance of ELP competence for success at university and beyond. This was strongly evident in all three parts of the primary research. In the focus group and survey data, there was almost unanimous agreement that ELP is an important factor for university studies and for academic success. When focus group participants were asked to define a ‘successful international student’, they cited a combination of good grades and English proficiency, and this view was corroborated in the survey. Although it was not always a neat or linear relationship, a correlation was found between IELTS test scores and GPA, consistent with some of the literature (Cho & Bridgeman, 2012; Feast, 2002; Kerstjen & Nery, 2000; Ushioda & Harsch, 2011). As would be anticipated in an EMI context, the study confirmed that it is almost impossible to score the highest university grades with poor English competence. It is possible (though rare) to score well linguistically but not academically, which shows that language functions as a critical enabler for academic success but does not guarantee it. This is as it should be. If it were not the case, domestic ‘native speaker’ students would be guaranteed the highest grades. It is reassuring to have research evidence confirm intuitive beliefs that language
functions as a conduit to facilitate success because it is the medium through which it is conveyed but not the only necessary attribute.

Findings also converged in relation to the possibility of being able to pass a university course/unit with relatively low ELP. With surprising candour, focus group participants admitted that it was possible to pass a course without strong English, although survey respondents held more tempered views on this. More than two thirds of the survey respondents believed that academics expected ELP to improve yet also reported that academics did not, in fact, pay much attention to the language of EAL students – even giving international students ‘a free pass’ – and providing limited feedback on it. This presumably sends the message to students that ELP is not vital for passing a university course. Test outcomes corroborate this to some extent; some participants had graduated with scores of IELTS 4.5 overall and as low as IELTS 4.0 in some subskills. While this was not common, large numbers had subskill scores at or below the minimum entry requirement for commencing an undergraduate degree. These poor language levels at graduation are consistent with some of the commentary and findings in the scholarly literature noted in Chapter 2.

As well as being important for academic success, there was also consensus that ELP was essential for their future beyond graduation. Focus group participants saw ELP as critical for getting a good job and migration prospects; almost ninety percent of the survey respondents agreed that a good standard of English was needed to do well in the job market. Test scores revealed that those who viewed ELP as important for their future plans – especially for employment and migration – were more likely to score well. There was therefore convergence between the quantitative and qualitative findings regarding its critical role beyond graduation, especially when students were planning to remain in Australia. This is entirely consistent with the recent literature. Reports on employability explicitly state the critical role of English language competency and the increased success of international students with high proficiency (see Chapter 2), and such data has become
increasingly visible of late both in Australia (Arkoudis et al., 2009; Gribble, 2014; Gribble & Blackmore, 2012; Hawthorne & To, 2014; Humphreys & Gribble, 2013) and elsewhere (Arthur & Flynn, 2012; Atwood, 2014; Li & Yang, 2013). Indeed, the most recent reports in Australia show that poor ELP impacts international students’ employment prospects more than any other factor (Gribble, 2014, 2015; Hawthorne & To, 2014).

There are numerous critical implications around these findings. Firstly, universities need to inform students and academic staff that competence in ELP is necessary both for academic success and for future employment. As already noted, the message should also be that language acquisition during degrees is not guaranteed. Additionally, it means that academics and institutions more generally need to beware the implicit messages they communicate to lower achievers by passing students with poor language skills. Instead institutions need to consider how to value ELP and ensure students cannot pass a course - and certainly not entire degrees - with poor linguistic competence.

7.3 Relating the findings to policy discourse
Research question 3.2 was interested in how far the conceptualisations and outcomes converged with relevant policy discourse. As we saw in Chapter 1, in the last decade, the policy discourse nationally in Australia has regularly drawn attention to the ELP outcomes of EAL students in higher education (Arkoudis & Doughney, 2014; AUQA, 2012; Australian Government, 2015; Birrell et al., 2006; Baird, 2010; Bradley et al., 2008; Chaney, 2013; DEEWR, 2009; Knight, 2011; TEQSA, 2011, 2013). The consensus view emerging from these reports and reviews is that ELP should improve during degree studies to ensure strong graduating outcomes and professional readiness. Some have even insisted that students should not be able to graduate without professional communication skills being explicitly assessed (Arkoudis & Doughney, 2014) because graduating competence is falling short of expected or optimal levels. This is, of course, more complex than it might seem as there
is not always a clear match between an undergraduate degree and a specific profession, though the general point is a valid one.

In Chapter 2, we noted that employers - arguably the ultimate arbiters of a student’s success - consider written and oral communication skills to be key graduate attributes and necessary for employability, yet these are considered to be typically lacking by EAL graduates (Arkoudis et al., 2009; Gribble, 2014; Gribble & Blackmore, 2012; Healy & Trounson, 2010; Humphreys & Gribble, 2013; Rowbotham, 2011). The findings of this study are consistent with these views, unfortunately providing further evidence that issues remain as far as can be measured with existing instruments. We have noted, for example, that ELP development was modest, and that some students graduated with less than desirable language levels. Although it was not within the scope of the study to track their success beyond graduation, test scores were often lower than individuals would require for their declared future goals. With the typical scores attained, employers would likely continue to view students’ communication skills as somewhat wanting in contexts where competence in English was required.

On the positive side, however, student conceptualisations noted an expectation and desire to improve their ELP during degrees. Their views therefore converge with Good Practice Principle (GPP) #3 and the corresponding English Language Standard for Higher Education (ELSHE) from the policy literature (see Chapter 1), which both state students’ responsibility for developing ELP:

GPP #3
Students have responsibilities for further developing their English language proficiency during their study at university and are advised of these responsibilities prior to enrolment.
The provider ensures that prospective and current students are informed about their responsibilities for further developing their English language proficiency during their higher education studies.

Students also reported being aware of the importance of ELP for graduation and beyond, noted in GPP #5:

**GPP #5**

English language proficiency and communication skills are important graduate attributes for all students.

The findings of this study are therefore largely consistent with policy discourse, which continues to suggest that more needs to be done to ensure students develop ELP and graduate with the requisite competence. It suggests that rather than being “a taken for granted element” in graduate attributes (DEEWR, 2009, p.9), ELP should be made explicit. A key finding of this study was students’ awareness of its importance and acceptance of responsibility for developing it. This may suggest that, at the research site at least, the message is getting through and is being heeded to some extent. The implication is that consideration should be given to activating students’ demonstrated motivation for language enhancement. Perhaps more essentially, since a nationally-mandated framework or set of standards for ELP has not materialised in the sector to date, it suggests that institutions that are serious about their students’ outcomes may need to attend to the identified issues of their own volition.
7.4 Relating the findings to key theoretical models

Research question 3.2 raised the issue of whether student conceptualisations converged with the theorisation from the field. Unsurprisingly, students had a relatively unsophisticated conceptualisation of AELP and found it a challenge to define. However, much can be learned from their comments.

First, some of the main SLA theories are considered, then key ELP frameworks in higher education, followed by a summary of the convergence and divergence between student conceptualisations and these theoretical models/frameworks.

7.4.1 SLA theories

The SLA literature indicates that communicative competence/language ability/proficiency (and its variant nomenclature) is both multifaceted and complex. Although the individual components vary by model as discussed in Chapter 2, in all of the models, ‘grammatical’ or ‘linguistic’ competence appears to be an uncontested component. It was anticipated that students would be very aware of such features and refer to them extensively, if not exclusively. Surprisingly, the sentence level and rule-governed aspects of the language were rarely mentioned, even by students who had recently transitioned from intensive English language programs to the University proper. In the focus groups, there were few references to grammatical features, aspects of accuracy or form per se. Rather than to emphasise its importance or their strengths/weaknesses, comments about grammar were used to contrast pre-sessional courses with university study, to comment on the limited time to focus on ELP at university, or to lament the lack of specific grammatical feedback from discipline academics. Students regularly reported a desire for more specific feedback on their writing in this study, consistent with other research (Warner & Miller, 2015; Chang, 2014).
Research suggests that academics do not believe English language should form part of their teaching practices (Arkoudis et al., 2012; Chanock, 2011a, 2011b) and grammatical features tend not to be highlighted by discipline academics in traditional Anglophone medium of instruction contexts (Basturkmen & Shackleford, 2015; Chanock, D’Cruz & Bisset, 2009; Costa, 2012; Doiz et al., 2013). As a result, accuracy tends not to improve (Knoch et al., 2015). The only linguistic feature repeatedly commented on by participants in the focus groups or survey was vocabulary. This corresponds with the linguistic feature most likely to be made explicit by academics (Basturkmen & Shackleford, 2015). On the one hand, it is perhaps reassuring that students are less focused on form and instead see language as bound up with broader functions in the academic setting. This suggests that students have moved beyond the mechanistic aspects of language to engage in the more purposeful and increasingly complex meaning-making that is necessary for their studies. On the other hand, if academics are not able to make comments in relation to linguistic features, it raises the question how students can improve their accuracy, and also sends a message to students that this aspect of their language is acceptable.

Many of the theoretical frameworks in the SLA literature also reference discourse/text competence. The centrality of text in the higher education context is evident in its assessment practices, which predominantly evaluate students via written and, to a lesser extent, spoken discourse. It was therefore expected that students would be cognisant of the specific text types from their discipline. Additionally, as some EAL students are required to complete language preparation program to meet the entry requirements (such as EAP, DEP or a test preparation course), it was anticipated that students might mention - albeit in broad or simplistic terms - the discourse features taught in these programs, such as differing genres or text types, rhetorical patterns and organisation, or matters related to cohesion and coherence. However, comments related to aspects of discourse at the text level were rare, and mention of them was limited to a small cohort in one focus group who had
recently completed a DEP program where such features had been highlighted to them. Similarly, only around a third of survey respondents showed awareness of differing text types by discipline, though some students did display some awareness of register, such as formality. As discussed earlier, students generally defined language and expressed linguistic difficulties in relation to macro skills but were unable to further break it down to articulate what exactly the difficulties with ‘writing’ or ‘speaking’ were. This suggests that student awareness is low, or that knowledge of such features has been forgotten or not transferred. Given the dominant place of written text - particularly the importance of genre in academic discourse - and the evident challenges with academic writing identified in this study, students would evidently benefit from rhetorical consciousness-raising and explicit (rather than implicit) instruction in the core domain-specific genres of their discipline.

A third component, and one with less agreement in terminology in the extant models, is related to various inter-related forms of sociopragmatic competence (Leech, 1983; Thomas, 1983), including sociolinguistic/sociocultural, intercultural and interactional competence. Such notions focus on the ability to make pragmatic choices so as to use language appropriately for the context of use and the recipient user, and involve constructing meaning in such a way as to ensure illocutionary meaning is conveyed. This is a complex notion and, unsurprisingly, not one that participants could readily articulate. However, implicit in their comments about challenges to communicate outside of the formal academic setting was a strong message of a perceived lack of sociopragmatic competence. This is evident in the students’ ‘troubles talk’, examples of critical incidents and challenges experienced with peers or local people. Whereas students attributed such issues to linguistic deficiencies on their part (such as a deficit in their context-specific vocabulary or pronunciation), it is evident that these were also matters of a sociocultural, intercultural and/or interactional nature. While preparation for all conceivable situations is impossible, it suggests that
students would benefit from support for dealing with such interactions. We will return to these three core competences in the heuristic model in section 7.5.

7.4.2 AELP models

In the frameworks related to language proficiency in the higher education context, a critical distinction is made between everyday and academic language/literacies. This has also been corroborated in school contexts with the BICS/CALP distinction. Professional language/literacies or ‘specialised/technical discourses’ is also noted as a third context of use (Harper et al., 2011; Mahboob, 2014; Murray, 2010; O’Loughlin & Arkoudis, 2012). As in the SLA literature, context of use is critical and uncontested. In this study, the context-specific nature of ELP in higher education was strongly evident to participants: everyday versus academic language was noticed by students from the very commencement of their degree studies and readily commented on by focus group and survey participants, consistent with the findings of other research (Humphreys et al., 2012). Some participants commented that everyday language posed more problems to them than academic contexts, because of the less predictable nature of the interactions and the use of less standardised linguistic forms. O’Loughlin and Arkoudis (2009) report similar comments. In academic contexts, discipline-specific vocabulary was particularly evident to participants. In fact, this was the only feature that participants could clearly articulate as a differentiating factor between disciplines. Participants did not identify professional literacies as a clearly separate dimension, most likely due to a lack of experience with it at this stage of their sojourn, but ELP was identified as being critical for finding a job and for the workplace.

Returning to Mahboob’s language variation model (2014), it was found that students had some level of awareness of the three dimensions posited: 1) user, 2) use, and 3) mode. They were able to identify some users and uses that increased their perceived challenge, for example, and noted particular
difficulties with the writing mode. However, the study showed that participants had relatively limited awareness of what constitutes or differentiates ‘specialised/technical’ discourses, a key component of the Mahboob model, and a lack of awareness at the discourse level was also evident. Overall, this evidences some divergence between student conceptualisations and theorisation in the field.

7.5 A heuristic for ELP in higher education
As noted in Chapter 2, the myriad of models proposed over the last four decades has not resulted in a framework for ELP in higher education that is universally agreed upon. The intention is not to produce a definitive model here. However, the findings of the study and the seminal SLA and AELP models might be usefully combined in a new way to present a more nuanced understanding of the uncontested aspects of the construct. The heuristic thus aims to aid conceptualisation rather than to function as a validated model. It comprises three dimensions: competences, contexts of use, and proficiency, as shown in figure 7.2.

![Figure 7.2. A heuristic of ELP in higher education](image)
The first dimension on the left side denotes the three core competences discussed above: linguistic, discourse and sociopragmatic\textsuperscript{30}. Linguistic competence refers to form and the sentence level rule-governed properties of language such as syntax, lexis, morphology, and phonology. Discourse competence refers to stretches of text beyond the sentence level, whether spoken or written and involving rhetorical patterning and organisation as well as coherence and cohesion. Sociopragmatic competence refers to the sociocultural, intercultural and interactional aspects of language needed to link linguistic form to context in order to construct and communicate intended meanings and actions appropriately, including awareness of register.

The second dimension on the right side refers to context of use, drawing on models of AELP in higher education discussed in the previous section. These differing contexts of use are termed ‘everyday’, ‘academic’ and ‘professional’ and are seen as successively cumulative across the student lifecycle. Commencing with everyday competence and some general academic competence at entry, everyday and academic competence specific to the discipline should be developed during the degree program. Towards the end of the degree program, professional competence specific to the field also becomes more of a focus, and is required in addition to the two former competences.

The third dimension on the model is proficiency, which is linked to time, because stakeholders expect proficiency to develop during university degrees. Competences are dynamic in nature and can develop at varying rates in different contexts of use, being neither linear, incremental nor lock-step. This means that competences are ‘perishable’ and learners might experience acquisition, attrition or stagnation, and may also be more or less proficient in one area. The model therefore acknowledges the fact that no-one is entirely proficient in all contexts at all times.

\textsuperscript{30}Strategic competence is included in some frameworks, though, because of its cognitive and metacognitive nature, some have suggested that it is a higher order competence functioning outside and independently from language knowledge. I concur with this view and therefore do not include it.
It is accepted that there is interaction between the competences and contexts of use and the lines are, in reality, blurred rather than solid because of this inherently porous division. Users need not only the resource (linguistic competence) but also the competence to know how and when to use it (sociopragmatic competence) in stretches of text (discourse competence), whatever the mode. This interactive model does not preference one competence or context over another but aims to show that ELP in higher education is multi-dimensional and that contexts of use and linguistic choices are inter-dependent.

7.5.1 Visualising student conceptualisations

It is possible to use the above heuristic to demonstrate where students’ conceptualisations of ELP converged or diverged in this study from the theorisation in the literature, as summarised in section 7.4. The lighter shaded intersections in the figure below denote areas that students displayed awareness of. The darker shaded intersections represent the more evident divergence: limited awareness was shown by participants in relation to discourse competence in the academic context of use and the competences required in professional contexts.

Figure 7.3. Divergence between student conceptualisations of ELP and the literature
7.5.2 Visualising changes in AELP during degrees

Hypothetical or idealised changes in ELP can also be modelled using the heuristic. For example, we might expect a student to start their degree program at the threshold ability in everyday and academic contexts of use but with little ability in the professional context of use. At the commencement of undergraduate degree studies, competences may be evenly distributed, as shown in hypothetical figure 7.4, or may vary as shown in hypothetical figure 7.5.

*Figure 7.4: Commencement of degree hypothetical 1*
By graduation, it would be desirable for proficiency to have improved in each competence as well as in each context of use, as modelled in figure 7.6 below.

However, as this study has shown, stagnation or attrition are also possible, or improvement may be uneven because outcomes were found to be dependent
on a range of factors. One alternative hypothetical trajectory is shown in figure 7.7 below but each student is likely to have a different profile as cohorts are not homogenous. The professional context of use may still be less developed than the everyday or academic contexts, as reflected in students’ more limited awareness of this context. This may depend (in part) on the relationship between the degree program undertaken and the future profession.

![Diagram of hypothetical developmental trajectory](image)

*Figure 7.7: End of degree hypothetical developmental trajectory*

### 7.5.3 Visualising intersecting competences and contexts

The basic heuristic described above was designed for parsimony and to be tractable for a variety of end users. This inherent flexibility means that it is also possible to illustrate the underlying complexity for applied linguists by showing where a competence and context of use intersect. As this study is largely concerned with the academic context of use, figure 7.8 illustrates some indicative extracted intersections by way of example.
Applied linguists can be directed to the related field, approach or subcomponent. For example, the intersection of academic context of use and linguistic competence focuses on the rule-governed aspects of language. Research in the field of Corpus Linguistics might be drawn on in relation to vocabulary, for example, including the high-incidence general and discipline-specific Academic Word Lists (e.g. Chen & Ge, 2007; Coxhead, 2000; Hirsh & Coxhead, 2009; Liu & Han, 2015). The intersection of academic context of use and discourse competence draws on the fields of EAP, ESP and ESAP including Discourse Analysis and Genre Analysis, and includes a focus on coherence/cohesion, text organisation and rhetorical patterning, and pragmatic competence for participation in spoken interaction (e.g. managing speakership such as turn-taking) as analysed in Conversation
Analysis. The third intersection of academic context of use and sociopragmatic competence focuses on conveying and interpreting meaning and choosing an appropriate linguistic resource and/or register for the use/useremode. Cultural awareness and intercultural understanding is also required for this appropriateness. This intersection therefore draws on the fields of Pragmatics, Academic Literacies and Systemic Functional Linguistics. It should be noted that sociopragmatic competence is complex and, although recognised as important, few articulated models have emerged to date. Mahboob (2014) has attempted to do so with users/use/mode distinctions in his language variation model, and the Academic Literacies field also deals with issues of identity, voice and power dynamics, for example, but more work is needed here as it is currently under-researched.

For all three competences in the academic context of use, academic corpora would be useful resources to evidence real language use. In relation to writing, corpora such as the British Academic Written English Corpus (BAWE) (Nesi, Sharpling, & Ganobcsik-Williams, 2004), the Michigan Corpus of Upper Level Student Papers (MICUSP) (2009), or the Cambridge Corpus of Academic English (CCAE, 2015) are of use. For speaking, the Michigan Corpus of Academic Spoken English (MICASE) (Simpson, Briggs, Ovens & Swales, 2002), the British Academic Spoken English (BASE) corpus (Thompson & Nesi, 2001), and the spoken English as a Lingua Franca in Academic Settings corpus (ELFA, 2008) might be utilised.

The illustrative extracted intersections in the above figure show two other dimensions: mode (i.e. differing by macro skill, mixed mode or digital communications) and user/s involved in the interaction, and evidence the underlying complexity of the construct.
7.5.4 Visualising curriculum coverage

Finally, it is also possible for TESOL/ALL experts to use the heuristic for practical pedagogical purposes such as to map curriculum coverage of embedded English language enhancement initiatives to ensure principled course design. The blank version of the grid is shown in figure 7.9 and an idealised completed version in figure 7.10. By working though this process, EAP curriculum developers or ALL specialists working to embed academic language and learning initiatives with subject academics might identify gaps in coverage and consider whether the gap was planned or unplanned. This process would lead to principled decisions related to the inclusion or exclusion of certain content, based on student needs. Similarly, the grids could be used to give consideration to individual student’s strengths and areas in need of improvement in EAP or credit-bearing language enhancement courses, which acknowledges individual language profiles.

![Figure 7.9. Blank grid for mapping curriculum coverage](image)

*Figure 7.9. Blank grid for mapping curriculum coverage*
7.6 Conclusion of the thesis

Since this study began, the national focus on the ELP of international EAL university students has oscillated between promised action and inaction. After a three-year hiatus, the Draft National Strategy for International Education suggests that the matter is back on the agenda (Australian Government, 2015b). The latter document affirms the importance of ELP during and beyond higher education studies, potentially paving the way for a nationally mandated policy and standards framework. Such a framework would ensure academic language development was core rather than marginal throughout degree studies (Arkoudis & Doughney, 2014) and would undoubtedly make the implications of this study far easier to put into practice. However, this has not materialised thus far. Chapter 2 also noted calls for sustainable whole-of-university approaches to the embedding and evaluating of AELP within disciplinary learning (Arkoudis & Doughney, 2014; Dunworth et al., 2014; Gunn et al., 2011; Harper, 2013; Kennelly et al., 2010; Murray & Nallaya, 2014; Sheridan, 2011; Wingate, 2006), and suggestions that all staff should share the responsibility for its development (Arkoudis, 2014). While the researcher strongly endorses these views, this approach has
had little traction to date as far as can be ascertained. Institutions appear not to have the appetite for such a large-scale response due to the commitment and degree of consultation that would be required to enact such change (Wingate, 2006), and academics generally have little interest or understanding of how to embed ELP and academic literacy into their teaching and learning practices (Arkoudis, 2014; Dunworth & Kirkpatrick, 2003). Since institutional commitment has been identified as one of three critical areas for ensuring ELP standards (Arkoudis et al., 2012), it is clear that recommendations need to be realistic to bring about such commitment.

A pragmatic approach may be required to get initial traction in relation to actioning the implications of this study. The sharing of responsibilities among support services, ALL practitioners and discipline academics is one way to make it less burdensome. More critically, reframing the construct of AELP as ‘Professional Communication and Employability Skills’ would likely secure more buy-in from academics. Situating academic language enhancement within the communication and employability skills required for the profession would be attractive to the institution as a way of improving graduates’ employability and protecting their reputation. It may be appealing to academics, experts in the professional discourse, and generally accepting of their responsibility to apprentice students to the discipline and prepare them for entry to the profession. It is also consistent with students’ reportedly higher levels of motivation at this stage of their studies. Tying a requisite standard for professional communication by graduation to the support offered in penultimate and final semester would have positive washback on learning and teaching and may, in the longer term, result in support being scaffolded into programs at earlier stages.

The recommendations below, then, derive directly from this study but also stem from a belief that a pragmatic and manageable set of implementable suggestions might be more palatable to institutions and, therefore, ultimately more effective, unless or until such matters are nationally audited or
mandated for the sector. The recommendations relate to policy and practice, capitalising on students’ reported high motivation points to develop their ELP at the key transition points of first semester and penultimate/final and also focus on areas of identified need. A summary can, of course, lead to a reductionist interpretation which belies the inherent involvedness of the matter under discussion, and the researcher therefore cautions against relying on the following section in isolation to account for the complexity of the issue.

7.6.1 Key recommendations

Key transition point 1: entry
Have support services (e.g. ALL practitioners and staff involved in Orientation) take primary responsibility for key transition point 1.

- Provide transition support for speaking and listening (including accent habituation) in everyday and non-formal contexts.
- Educate students about typical ELP acquisition rates to ensure goals are realistic, about the need to actively develop it.
- Provide access to first semester academic language and learning interventions which focus on writing skill development, targeting those most likely to be at risk but without stereotyping cohorts.
- Educate students about the value of ELP for academic success and beyond, including the research evidence showing that employers highly value it.
- Introduce students to the institution’s Professional Communication and Employability Skills policy and the standard required by graduation.

Key transition point 2: transition to graduation
Have academic elements (e.g. program/course convenors and discipline academics) take primary responsibility for the transition to graduation stage under the umbrella of a ‘Professional Communication and Employability Skills’ policy and framework.
• Devise a Professional Communication and Employability Skills policy and framework, comprising an explicit ELP component for all undergraduate programs, and communicate this to stakeholders.

• Offer timed interventions in penultimate/final semesters, capitalising on students possible increased motivation levels, in order to develop Professional Communication and Employability Skills.

• Focus the interventions on developing writing and speaking skills for the profession, rhetorical consciousness-raising, explicit instruction in the core domain-specific genres, and explicit lexical and grammatical accuracy work, ideally in collaboration with ALL practitioners.

• Ensure that, in order to graduate, students are required to demonstrate AELP within their discipline at the agreed standard as per the Professional Communication and Employability Skills policy and framework.

7.6.2 Future research

This study indicates numerous avenues for future research. It would be of interest to investigate whether EAL students in other contexts have similar conceptualisations to those identified at this research site, especially via a longitudinal study. Postgraduate and research students’ views could also be examined and compared to the views of undergraduates as there may be critical differences by program level. It would also be of interest to measure graduating outcomes using a discipline-specific test (where a suitable one exists), or via other means.

Future research might also follow up with students regarding whether, in the medium to long-term, they achieved their desired goals such as migration, employment or further study. Another area of possible research is whether there are differences in the profile of student who stays in Australia for work after graduation compared to those who go on to further study. It would also be of interest to explore the views of offshore employers in relation to the
of returning EAL graduates. This study also motivates further research into whether additional variables impact outcomes or conceptualisations, specifically family background indicators such as SES and first-in-family status. As noted in the limitations section, literature review and Chapter 6, these have been identified as factors impacting EAL children’s success and domestic students’ tertiary success but this data is not currently collected in relation to the international cohort. The study suggests that we should not treat EAL international students as an undifferentiated mass and therefore further cohort studies should be undertaken.

Most of all, this study indicates that further work is needed in relation to how best to capitalise on students’ acceptance of responsibility to improve their language during university degree studies, and how best to mobilise such reported motivations.

### 7.6.3 Final remarks

This thesis was motivated by the desire to make the first order stakeholder ‘subject of study’ by investigating student conceptualisations of the central construct of ELP in higher education, and then comparing these to outcomes. With burgeoning numbers of students in higher education internationally, and rapidly expanding EMI programs around the world, the issue of ELP is not going away. This thesis has therefore added to the literature and progressed what is known about the ELP conceptualisations and outcomes of EAL international students, finding that ongoing institutional attention with regard to ELP is required even in traditional Anglophone nations. Reassuringly, this thesis has shown that many students recognise the value of ELP in the higher education context, report being motivated to develop it and accept the responsibility for doing so. Importantly, the study identified periods when students report being most receptive to intervention. Aided by the heuristic, we can better conceptualise the construct of ELP in higher education for various stakeholders and, coupled with the recommended actions to capitalise on such conceptualisations, it is believed
that a positive impact could be made on the outcomes of future undergraduate EAL students in the sector should institutions choose to heed them.
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