

## **English for Academic Skills Independence: Focus on Vocabulary.**

Mark Bassett and Quentin Allan

Auckland University of Technology, New Zealand

### **Abstract**

What does it mean to know a word? When asked this question, students often appear flummoxed, lacking either the metalanguage or linguistic knowledge to articulate an insightful response. This paper argues that lexical awareness, coupled with an extensive vocabulary, are essential components of the multiple academic literacies required of students. In order to support students' vocabulary acquisition and understanding, Auckland University of Technology's Learning Advisors have developed a targeted English language programme called *English for Academic Skills Independence* (EASI) with a clearly foregrounded vocabulary component. EASI comprises a series of 12 workshops, designed to introduce participants to the workings of English language and to promote autonomy in tertiary students. Each two-hour EASI workshop is divided into five discrete sessions: grammar, vocabulary, punctuation, pronunciation, and conversation skills. Using Nation's (2001) framework, we take as our point of departure the tripartite structure of form, meaning and usage. Under the heading of form, the main focus is on parts of speech and morphology (derivational roots and affixes). Under the heading of meaning, the programme first considers denotative and connotative meanings, touching on notions of concept development, and then moves on to explore sense relations. Under the heading of usage, our approach is informed by recent developments in corpus linguistics that yield frequency information, leading to resources such as Coxhead's (2000) Academic Word List. From a discipline perspective, it is clear that a strong sensitivity to vocabulary within a given academic discourse is fundamental to academic literacies development at tertiary level. Also included under the heading of usage are syntactic and lexico-grammatical considerations such as collocation and colligation. This paper will outline the theoretical approach taken in developing the vocabulary component of the EASI

programme and report on two iterations of delivery: the original teaching session and subsequent revisions based on feedback from both students and the teaching team.

## **Introduction**

The number of international enrolments in New Zealand tertiary education continues to rise. Of those international enrolments, a substantial number of students have English as an additional language (EAL). In addition, a significant number of domestic enrolments come from non-English speaking backgrounds, while others who do come from English speaking backgrounds may need to develop their ability to use English accurately in academic contexts. Tertiary institutions employ standardised English language tests, such as the International English Language Testing System (IELTS), as entry requirements for students who come from non-English speaking backgrounds. However, gaining the minimum scores in such tests required to gain university entrance does not guarantee that non-English speaking background students bring with them the academic literacies they need in order to successfully negotiate their study programmes. Also, students who do have English as their first language and are over the age of 20 do not need to have gained school level qualifications in order to enrol in tertiary study in New Zealand. These students are also not certain to possess requisite academic literacies.

Since 2010, New Zealand tertiary institutions have been assessed against the Tertiary Education Commission's (2010) educational performance indicators, which measure the number of students who:

- successfully complete their courses
- complete their qualifications
- progress to higher level study
- are being retained in study.

Although these indicators have placed further responsibility on tertiary institutions to optimise the student learning environment, the need to address issues that affect student success is not a novel idea (Tinto, 1993, 1997; Thomas, 2000; Thomas, 2002; Thomas & Tight, 2011). Students are not only tasked with learning the subject they have enrolled to study, they must also learn the discourse of that subject as well as the

discourse of the institution (Gee, 1996; Hyland, 2009). Furthermore, the diversity of the student population is such that some students have to acquire the ‘cultural capital’ that other students already possess (Bourdieu, 1993).

To assist these students towards success in their studies, tertiary institutions provide a range of support services through faculty-based initiatives and/or centralised services such as those provided by student learning centres and teaching and learning units. Learning Advisors at New Zealand tertiary institutions work with students towards the development of various student academic literacies, including aspects of language use at the lexico-grammatical level (vocabulary, syntax, grammar, punctuation).

Over the last decade, responses to the growing linguistic diversity and academic literacy levels of tertiary students in Auckland have included the introduction of a post-enrolment diagnostic test of academic English at the University of Auckland and a piloted vocabulary diagnosis tool at Auckland University of Technology (AUT). The University of Auckland’s Diagnostic English Language Needs Assessment (DELNA) involves all newly enrolled students participating in a computer-based DELNA screening session, in which they complete a speed-reading task and a vocabulary task (Knoch, 2009). Students with high academic English proficiency, as identified through DELNA, are not required to participate further. All other students must complete a more intensive diagnostic assessment that is similar to an academic IELTS test. Outcomes of the assessment then determine the nature of support with which students then engage to enhance their academic English skills, which can include one-to-one consultations with Learning Advisors, subject-specific language tutorials taught within their programme (Knoch, 2009), or credit-bearing English language courses (*Academic English Language Requirement*, n.d.).

In response to student demand, and to augment the provision of one-to-one consultations between students and academic Learning Advisors, the AUT Learning Advisors team has developed a targeted English language programme, which focuses on the language structures and functions that are both appropriate for, and essential to, successful engagement with an English speaking academic context. The motivation for designing and implementing the *English for Academic Skills Independence (EASI)*

programme, with an emphasis on vocabulary development, stemmed from an identified student need for orientation to academic English. The AUT Learning Advisors team work with students on a one-to-one basis, and regularly discuss with students rhetorical and lexico-grammatical features of both students' writing and discipline-specific texts. Common themes that have emerged from these one-to-one sessions (as well as issues raised at Faculty Board meetings) are as follows: students grappling with unfamiliar academic and technical vocabulary in their reading materials and during their classes; students being unaware of effective vocabulary learning strategies; and considerable variability in lecturer approaches to vocabulary teaching, or even acknowledgement that it is within their role. These themes are consistent with Nation's (2011) discussion of vocabulary teaching practices at tertiary level. The vocabulary component of EASI covers word knowledge, vocabulary learning strategies, academic vocabulary lists, technical vocabulary, linking words, affixes, collocation, colligation, metaphor and sense relations. The 12 workshops are designed to introduce participants to the workings of English language and to promote autonomy. Each two-hour EASI workshop is divided into five discrete sessions: grammar, vocabulary, punctuation, pronunciation, and conversation skills.

This paper posits that vocabulary development is a neglected component of student literacies development, and argues that lexical awareness, coupled with an extensive vocabulary, are essential components of the multiple academic literacies required of students. Before considering the approach taken in developing the vocabulary component of the *EASI* programme, we carefully explore the rationale for encouraging students to focus on vocabulary, touching on student autonomy, emphasising the importance of resource awareness and developmental strategies from a student perspective. The discussion section explores promotion and attendance of the programme, outlines the need for close collaboration between Learning Advisors and Faculty staff in embedding vocabulary learning into course content, appraises the potential for programmes such as EASI to respond to diverse student needs, and concludes with a reflection on the AUT Learning Advisors' experiences in developing the programme.

### **Theoretical grounding**

Before outlining the theoretical grounding for the vocabulary component of EASI, we might pause to question our motives: why should we go to the trouble of focusing on this aspect of language; what is the rationale for this preoccupation with words? Our intuition as language teachers suggests that lexical awareness is critical for reading and listening (Beglar, 2010), yet, historically, in formal educational programmes (both mainstream secondary in New Zealand, and in second language development), vocabulary appears to have been somewhat neglected (Folse, 2004; Nation, 2001). One explanation explored by Folse is that teacher-training courses have often tended to de-emphasise the role of explicit vocabulary teaching for a number of reasons, including concerns that students will find vocabulary activities boring. More recently, an informal survey of Learning Advisors (Allan, 2013) indicated that vocabulary teaching does not get much explicit attention in New Zealand tertiary institutions, partly due to time and partly because of staffing constraints. This is of concern, because, in terms of focus on developing students' academic literacies, numerous commentators have emphasised the importance of vocabulary acquisition (Coxhead, 2012, 2016; Folse, 2004; Jordan, 1997; Milton, 2009; Nation, 2001, 2011; Storch & Tapper, 2009; Wray, 2002); this appears to be equally true for native speakers and non-native speakers. Students, moreover, feel that they need more explicit guidance (Allan, 2014). Perhaps the most compelling argument for developing a vocabulary component lies with the effort-reward equation, based on the observation by Nation (2001) that "deliberate vocabulary learning ... is highly efficient, resulting in initial learning of large amounts of vocabulary in a very short time" (p. 217). An extensive vocabulary is vital if students are to succeed in academic study.

Approaches for systematically teaching vocabulary already exist within the context of comprehensive language programmes such as the International English Language Testing System (IELTS) or the Cambridge Certificate of Proficiency in English (CPE). These are preparatory language courses, however. The EASI programme is somewhat different, given that by the time students arrive at university, they are expected to already have an extensive working vocabulary and so the focus shifts towards empowering students to continue expanding and enhancing their lexicon. This is consonant with a heutagogical orientation in which university students are

encouraged to develop greater autonomy and responsibility for developing their own academic literacies (Hase & Kenyon, 2007). However, autonomy does not just happen (Benson, 2001; Hase & Kenyon, 2007). With a shift in emphasis towards empowering the student, the implications for programme design suggest a greater need to clearly differentiate between linguistic knowledge and self-knowledge, in the sense of meta-cognitive awareness. In an attempt to unpack what we mean by linguistic knowledge, let us first clarify what we mean by vocabulary.

Numerous commentators have pointed to the difficulty of defining vocabulary, with insights coming variously from lexicography, corpus linguistics, and functional approaches to language. Complexity can be seen, for example, in the ‘phraseological approach’ which Flowerdew (2015) defines as “recurrent multi-word expressions, often categorized functionally” (p. 58), and also Halliday’s (1985) Systemic Functional Grammar (SFG) which sees grammar and vocabulary not as distinct aspects of language – as was traditionally the understanding – but as the same linguistic phenomenon viewed from different vantage points.

From our perspective as Learning Advisors, with our objective to develop a coherent and practical vocabulary development programme, we found it helpful to examine the concept of vocabulary, firstly from a language perspective, and then from an individual, psycholinguistic perspective. Acknowledging the difficulty of defining vocabulary, we posed some simple (and some not so simple) questions, starting with ‘what is a word?’. This raises the issue of whether we are referring to lemmas (what we might consider as headwords in the dictionary) or all of the inflected forms, so for example the concept ‘chair’ is associated with its plural ‘chairs’ and the verbal forms ‘chaired’, ‘chairing’, etc. Once we get started on this route we encounter an impulse to start counting and categorising the words, and here we find problems of selection. Do we include multi-word bundles and compound words (Biber & Barbieri, 2007)? Do we include technical terms that are only encountered in disciplinary discourse communities? Do we include words borrowed from other languages? And what about obsolete words? We were then prompted to consider how many words there might be in the English language. One recent estimate is just over 1 million (*Global Language Monitor*, 2014), although, from a lexicographer’s perspective, the number would be considerably smaller, perhaps only 250,000 words (*Oxford Dictionaries*, n.d.). These

questions may be primarily of academic interest, but the answers do have practical implications for language teachers and the developers of resources such as word lists.

Moving on from the language as a whole, we might then consider the issue from an individual, psycholinguistic perspective: for example, how many words might there be in the vocabulary of an educated native speaker. Estimates vary for the vocabulary size of native speakers, ranging from 20,000 words to 30,000 words (Nation, 2001; *The Economist*, 2013). Biemiller and Slonim (2001, cited in Nation, 2001, p. 13) provide a useful rule of thumb, suggesting that “for every year of their early life, starting at the age of three and probably up to 25 years old or so, native speakers add on average 1000 word families a year to their vocabulary.” Estimates such as these then prompt us to consider the constitution of the ‘mental lexicon’, and to pose intriguing questions relating to how words are stored in the mind, and how human beings acquire vocabulary in the first place (Aitchison, 1987). Such psycholinguistic insights into the structure and acquisition of the mental lexicon have been helpful in developing the vocabulary enhancement component of EASI.

Aitchison identifies three different developmental tasks associated with vocabulary acquisition: labelling, packaging and network building, each of which happens gradually and continues throughout an individual’s life. Labelling is explored in terms of twin concepts: ‘signifier’ and ‘signified’, in other words, we gradually develop increasingly nuanced understanding of symbolic meanings through interaction with parents, siblings, and members of the wider community. This ability to make sense of the world develops gradually, emerging in most children towards the end of Piaget’s sensorimotor stage (i.e., birth to two years old) (McLeod, 2010). In considering how EASI students might process new vocabulary, it is useful to invoke Aitchison’s concept of ‘packaging’. This appears to involve association of actual objects with prototypes, which results in the formation of lexical sets; for example, we might conclude that a prototypical chair has four legs, a flat surface for sitting on, and some sort of back rest. Aitchison draws on Rosch’s ground-breaking work on natural categories and prototype theory (1973), which has helped psycholinguists to better understand how individuals might form cognitive networks of related words and concepts. From these understandings, language teachers are better able to consider ways in which students might package and retrieve words. Considering the complex

network of associations and possibilities for retrieval, we can consider how we encounter words when spoken through their sounds; and how we encounter words when written in terms of their morphology – the size and shape of words on the page. With respect to network building we might also consider the emotional and personal relationship that a learner establishes with each word in terms of their denotative and connotative meanings. This includes, as outlined by Morgan and Rinvolucri (1987), the ‘kinetic sensation’ of articulating the word, semantic prosodies, literary associations and intertextuality, the unique circumstances of encountering a word for the first time and the affective associations triggered by that meeting. But from an EASI student’s perspective, familiarity with a word may not, in itself, be enough for receptive and productive mastery. Therefore, let us now move on to consider practical implications of vocabulary acquisition.

When we consider what it means to know a word, we take as our point of departure Nation’s (2001) tripartite structure of form, meaning and usage. The concept of form can be explored firstly, from a phonological perspective, with the focus on the articulatory mechanisms involved in production of the word, and the aural cues involved in recognising and making sense of spoken language; explicit attention is paid to these dimensions in the pronunciation component of EASI. From a written text perspective, a focus on form involves the shape of a word (morphology) and technical details of how a word is written (graphology). A focus on form also brings into play the familiar parts of speech (nouns, verbs, adjectives, etc.), and prompts us to consider the role of derivational affixes to generate new words, typically changing the part of speech; for example, *connect* (verb) >> *connection* (noun), or *danger* (noun) >> *endanger* (verb). Similar, but slightly different, are a small set of inflectional suffixes (e.g., -s, -‘s, -ed, -ing, -en, -er, -est).

We might illustrate this with an everyday example from the world of Information Communication Technology (ICT). Consider, for example, a *broadband connection*: this can be *established* or *broken*; it can be *slow* or *fast*. When we look more at different forms used to express these ideas, we might use, for example, third person singular present -s (*connects*), past simple -ed (*connected*), continuous or progressive form -ing (*connecting*), the past participle -en (*broken*), plural marker -s (*connections*), possessive -‘s (*the service provider’s reliability*), comparative -er (*faster*)



and superlative –est (*fastest*). From a language teaching perspective, it is important that students understand the productive power of these derivational and inflectional affixes and consciously develop word-building skills that can help receptively in decoding spoken language and written text, and productively in speaking and writing.

The second aspect of Nation’s framework involves semantics. That is, we turn our attention to the meaning of a word. Here it is useful to consider two types of meaning: the first type is more objective, and we can call this the dictionary, or denotative meaning (e.g., dog = canine quadruped). The second type of meaning (connotative) is more subjective, and depends on the individual’s personal experience of the word or concept; so for example, the word ‘dog’ might have positive connotations of a friendly, companionable pet; alternatively, it may evoke a vicious, snarling, biting beast. When we consider the remarkable way that human beings manage to communicate across a range of situations, we also notice that sometimes miscommunication occurs. There are many reasons why people misunderstand each other, but one involves a mismatch of concepts. Some people have a clear sense of a concept and related terms; others may have only the haziest sense of what is involved. Therefore, when we consider the relationship between a word and its concept, a useful starting point is the observation that “natural language concepts have vague boundaries and fuzzy edges” (Lakoff, 1972, p. 183, as cited in Aitchison, 1987). In other words, there is no fixed concept for any given word, only approximate understandings which are more or less helpful in our attempts to communicate. For example, if we return to our previous exploration of the concept of a chair, we may discover that the concept somehow has to include such outliers as the electric chair, or perhaps even a specialised ‘chair’ for entertaining children, (i.e., a swing, or a see-saw) or riding a horse, (i.e., a saddle). We can also consider literal meanings and extend these to metaphorical and figurative representations; for example, we notice that the prototypical meaning of chair is an item of furniture for sitting, but a glance at the dictionary reveals that it can also refer to the head of a committee or, in a university context, a professor. This then leads us to explore the fascinating world of sense relations: for example, synonymy (similar meaning), antonymy (opposite meaning), and hyponymy (categories and hierarchy), to name just a few.

The third component of Nation's framework is usage. It is not sufficient for a learner to know about the various forms of a word and understand meanings without an awareness of how the word is used in different settings, such as informal, colloquial usage or more formal, academic contexts. Useful information about how words are used is increasingly available following recent developments in corpus linguistics, leading to a range of user-friendly resources. Some of these resources are designed expressly for tertiary students. In developing EASI, we considered a range of resources; for example, from a New Zealand perspective, Coxhead's (2000) Academic Word List, and from an American perspective, the Academic Vocabulary List from Brigham Young University (Davies, n.d.). Other resources are designed for general reference; for example, the New General Service List (Browne, 2013). These resources provide practical information about the functional use of words and multi-word bundles, such as transition markers; they also provide frequency information about how technical words are distributed across discourse communities. Another important aspect of usage is knowing how words are likely to be used with other words – or collocation – as outlined by Sinclair (1991). A related concept is colligation, which can be defined as knowing which grammatical patterns are likely to be associated with a particular word (Aarts, 2014).

From a student's perspective, linguistic knowledge is available in the following resources: dictionaries, thesauruses, and (less frequently) grammar reference books. If students are to exploit these resources effectively and efficiently, they need a working knowledge of the traditional parts of speech and some understanding of English grammar. It is also in students' interests to be aware of developments in corpus linguistics that provide frequency information, as identified in the various vocabulary lists, and which inform development of learner dictionaries. From a vocabulary acquisition perspective, one particularly useful by-product of corpus linguistics has been the availability of free online concordancers, which provide visual displays that can be very useful in helping to distinguish between similar words. The interface and output can appear bewildering at first sight; however, gentle guidance and opportunities to explore are productive and rewarding. For example, imagine a student has expressed confusion over the use of 'affect' and 'effect'. A search via a concordancer, such as Lextutor (Cobb, n.d.), will generate a list of every occurrence of the word in a large

collection of texts (known as a corpus). The key word will appear surrounded by its immediate context in a display which is known as Key Word in Context (KWIC). Note how the layout in Figures 1 and 2 draws attention to the word immediately after or before the keyword.

<b>affect</b> (18) sentence examples in uwl.txt		
1	We have produced curricula for high schools that will	<b>AFFECT</b> approximately 2.5 million students of high school biology, many of whom may be studying biology and its societal implications for the last time in their lives.
2	Many factors which	<b>AFFECT</b> sibling relationships are described, and research findings concerning siblings, one of whom has a disability or chronic illness, are reviewed.
3	Of course, those ideas are presumed in turn to represent things, but the accuracy of that representation does not directly	<b>AFFECT</b> the meaning of the word.
4	We have produced curricula for high schools that will	<b>AFFECT</b> approximately 2.5 million students of high school biology, many of whom may be studying biology and its societal implications for the last time in their lives.
5	Many factors which	<b>AFFECT</b> sibling relationships are described, and research findings concerning siblings, one of whom has a disability or chronic illness, are reviewed.
6	Of course, those ideas are presumed in turn to represent things, but the accuracy of that representation does not directly	<b>AFFECT</b> the meaning of the word.
7	That meant that the rioting did not	<b>AFFECT</b> the British Government's decision, announced on Friday, to invite the I R A 's political wing, Sinn Fein, to take part next month in full- fledged peace talks for the first time since sectarian violence erupted in Northern Ireland in 1969.

Figure 1. Easy-to-read sample concordance output: KWIC for 'affect'

<b>effect</b> (80) sentence examples in uwl.txt		
3	The simplest kind of ambiguity is the pun, which intentionally uses one word to mean two different things, usually with a comic	<b>EFFECT</b> .
4	In other words, to decide that an	<b>EFFECT</b> , in this case a relationship, exists.
5	A word that has exactly the same	<b>EFFECT</b> on my ear as a badly squeaking door hinge is "orientate."
6	The misconceptions discussed in this paper all are based on the quite common fallacy that a cause should necessarily resemble its	<b>EFFECT</b> (Nisbett and Ross, 1980).
8	Economists across the political spectrum agree: Turning a nonunion job into a union job very likely will have a bigger	<b>EFFECT</b> on lifetime finances than all the advice employees will ever read about investing their 401(k plans, buying a home or otherwise making more of what they earn.

Figure 2. Easy-to-read sample concordance: KWIC for 'effect'

The examples here graphically illustrate the patterns of usage for 'affect' as a verb, compared with 'effect' as a noun (Further investigations can help to shed light on the behaviour of 'affect' as a noun, and 'effect' as a verb). The EASI programme provides

students with a supportive classroom environment in which to make investigations through an on-line concordancer. In our endeavour to make EASI as relevant and practically useful as possible, we have aimed to draw students' attention to corpus-based resources, especially those which have been developed by practising language teachers, such as Tom Cobb, the creator of Lextutor. In addition to concordancing tools (word lists, frequency counts, and collocations), vocabulary development activities, including online tests, are available on the Lextutor website ([www.lexutor.ca](http://www.lexutor.ca)). Recent developments in corpus linguistics have had a very positive effect on language learning resources; moreover, increasing numbers of students are engaging directly with corpus output in the form of self-generated concordance lists (Allan, 1999, 2002; McEnery & Xiao, 2011). Developments in corpus linguistics have also resulted in far greater understandings of how language works; we have attempted to incorporate relevant understandings into the EASI vocabulary materials. Nation (2011) notes that “over 30% of the research on L1 and L2 vocabulary learning in the last 120 years [has occurred] in the last 12 years” (p. 530).

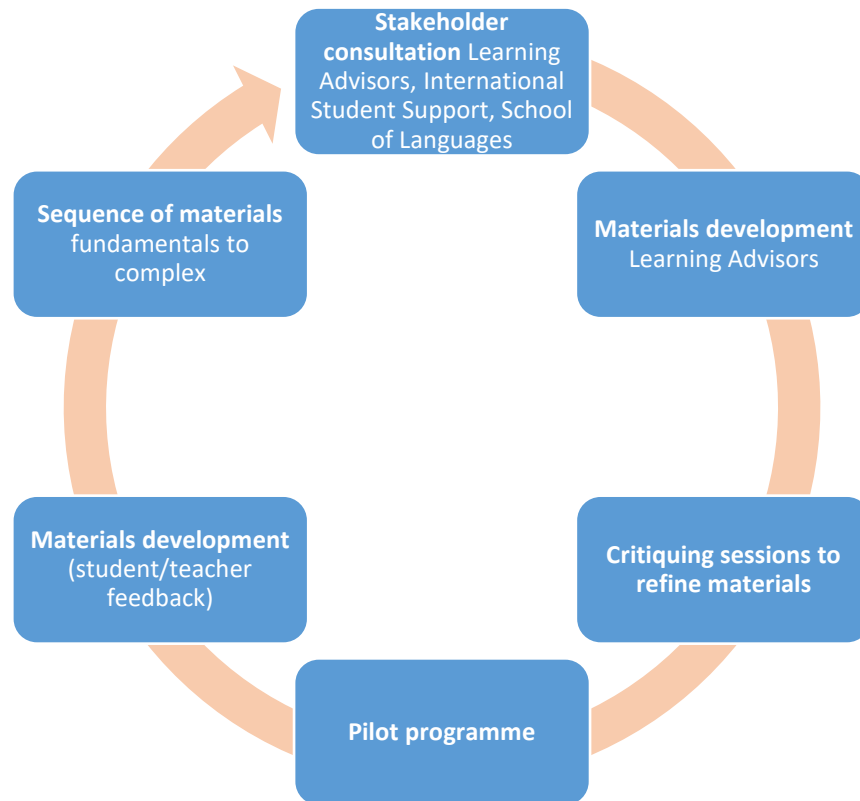
From our observation, and from student feedback, the benefits of vocabulary enhancement for students at tertiary level are clear: in terms of practical outcomes, students develop the ability to select appropriate lexis for academic assignments; they develop proof-reading skills and become adept at critiquing their own writing, applying metalanguage as appropriate. With guidance, students develop productive and receptive vocabulary skills, (e.g., word building), and a more finely nuanced awareness of formal, informal, technical and academic registers. Explicit guidance is necessary in the early stages, but as students gain in understanding and confidence they become increasingly autonomous, developing an awareness of resources, an appreciation of the protean nature of language, and a metacognitive sense of their own thought processes when engaging with vocabulary issues. Our awareness of the importance of vocabulary acquisition has informed the development of EASI and prompted us to share our insights with other staff working in tertiary institutions in Australasia, hence this paper.

## Materials development

Following a pilot programme in 2014, the *EASI* programme has been rolled out on three campuses and is now available in multiple iterations through the academic year, including Summer School. The *EASI* programme adds to the AUT Learning Advisors team's extensive suite of workshops that focus on academic literacy and numeracy development. *EASI* has been developed within the sound theoretical framework of Systemic-Functional Linguistics (Halliday, 1985; Halliday & Matthiessen, 2013), which emphasises the use of lexico-grammar as a resource for communicating precise meanings. Underpinning all AUT Learning Advisors' activities is the ultimate goal of supporting students towards greater autonomy in their learning; this goal has been a guiding principle in the development of the *EASI* programme. For further discussion of the background and development of the *EASI* programme with a focus on the grammar component, see Allan, 2014).

The topics addressed in the vocabulary component of the *EASI* programme (from here on, referred to as *EASI* vocab) were agreed on through an iterative process focusing on what students needed to know about English vocabulary and how to learn it. At the outset, the aim was to work collaboratively with other university departments (Hocking & Fieldhouse, 2011). In order to include as many perspectives as possible on the vocabulary learning needs of students, four Learning Advisors began a series of meetings in 2013 that also included staff from International Student Support and the School of Languages. Between meetings on choice of vocabulary topics, the Learning Advisors generated teaching materials which were then critiqued by the whole group at subsequent meetings and then refined. Ultimately, twelve *EASI* vocab sessions were designed and then piloted over the 2014 summer school as part of the full *EASI* programme. Immediately after completion of the pilot, further materials development occurred, incorporating both Learning Advisor and student feedback. Student feedback had been sought in a focus group workshop that took place at the end of pilot. Following further refinement of materials, the sequence of topics was finalised, with topics moving from fundamental to complex as the programme progressed. Once the twelve sessions had all been delivered in Semester 1, 2014, the cycle was repeated in order to fine tune materials to better respond to student need in time for Semester 2.

The cycle is represented in Figure 3 below:



*Figure 3.* EASI vocab materials development cycle

Although the initial process was time consuming, and the group often faced difficulty in marrying their schedules due to thin staffing levels, it was immensely productive in generating focused and engaging teaching materials. The critiquing sessions allowed each Learning Advisor to deliver their materials to a group made up of language and literacy experts, teachers, English as an additional language speakers, and staff involved in international student support. Therefore, the feedback yielded was thorough and diverse, enabling each presenter to learn about the clarity and scope of their materials, as well as their teaching style. And, for those providing the feedback, rich opportunity to learn from colleagues' pedagogical styles was a stimulating bonus. We can recommend this process to others; it is worth fighting to create such windows of time, around all of the student-facing time and other day to day responsibilities. The

collaborative development of finely tuned materials can enhance student learning, while at the same time those involved in the collaborative work benefit greatly from the collegial process.

The EASI vocab materials development cycle resulted in 12 topics. As outlined in the theoretical grounding section above, the experience of those involved in developing the materials was informed by Nation's (2001) framework of form, meaning and usage. The 12 topics, which progressively increase in complexity, are listed below in Table 1:

Table 1. *List of EASI vocab topics*

Session 1	•Word knowledge, dictionary skills, vocabulary learning strategies
Session 2	•Formal vs informal language
Session 3	•Parts of speech, Academic Word List, Academic Vocabulary List
Session 4	•Linking words (introducing, adding, comparing, concluding)
Session 5	•Linking words (exemplifying, cause/effect, qualifying, emphasising)
Session 6	•Technical vocabulary
Session 7	•Prefixes
Session 8	•Suffixes
Session 9	•Synonymy, antonymy, thesauruses, dictionaries
Session 10	•Collocation
Session 11	•Colligation
Session 12	•Metaphor and sense relations (hyponymy, meronymy, homonymy, polysemy)

Each of the weekly two-hour sessions uses PowerPoint to support the delivery mode. Content delivery is interspersed with whole class discussion and group activities.

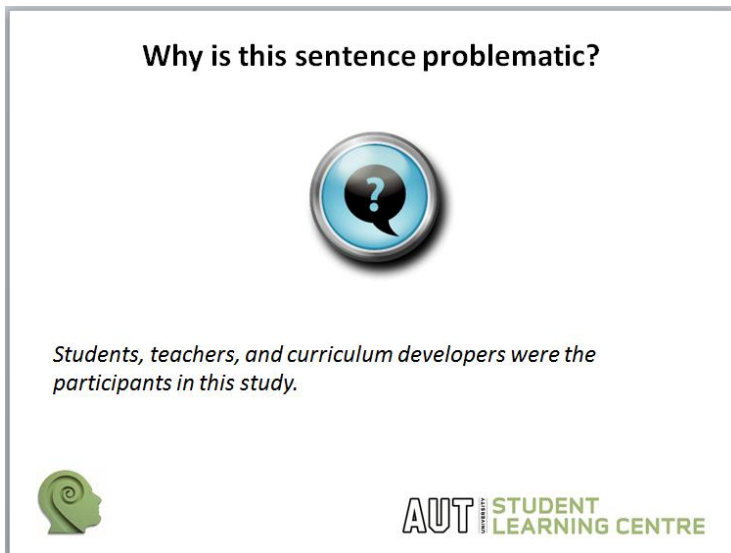
### **EASI Vocab Session 12**

Session 12 focuses on metaphor and sense relations, the final topic of EASI vocab.

Much of the fundamental vocabulary knowledge that earlier sessions cover is brought to bear in this session as the linguistic connection between lexis and grammar is made apparent. The following section explores the development of the teaching materials for one EASI vocab session, and outlines how the session was originally presented, then subsequently augmented in response to student and teacher feedback.

#### ***Original version: Semester 1, 2014***

The first half of the presentation addressed figurative language, and explored how metaphor may be employed in academic writing. Figure 4 shows the first slide that introduced the concept of sense relations:



*Figure 4.* Problematic sentence for discussion

This sentence is linguistically problematic because it transgresses the fundamental principle of effective text construction from the reader's perspective (i.e., to present information from general to specific, from given to new). In class, students were asked



to volunteer reasons for this sentence not working as well as it might. The next slide (Figure 5) provided an explanation by contrasting two versions of the same information:

**What is the focus in each sentence?**

The participants in this study were students, teachers, and curriculum developers. ✓

Participants is a family word for students, teachers, and curriculum developers.

General ———> Specific

Students, teachers, and curriculum developers were the participants in this study. 🗣️

Students, teachers, and curriculum developers are types of participant.

Specific ———> General

Figure 5. Movement of ideas from general to specific

At first, only the two sentences were visible to the students; the Learning Advisor then gradually revealed the annotations demonstrating movement of ideas from general to specific, with the first sentence indicating the desired order. After the concept had been established, the Learning Advisor then explained that knowing how to organise words and ideas in this way helps make communication clearer, and that this is what is meant by ‘sense relations’.

The presentation then progressed through six sense relations:

- hyponymy (categorical relationships);
- meronymy (part-whole relationships);
- synonymy (words with similar meanings);
- antonymy (words with opposite meanings);
- homonymy (words that sound and look the same, but have different meanings);
- polysemy (words that sound, look and mean the same)

The following slide (Figure 6) illustrates hyponymy, which is concerned with categorical relationships: ‘computer’ is the superordinate of ‘desktop’, ‘laptop’, and

‘tablet’ and ‘iPad’, ‘Samsung’ and Windows’ are subordinates of ‘tablet’. It was ultimately agreed among the Learning Advisors responsible for developing the materials that this content delved too far into linguistic terminology.

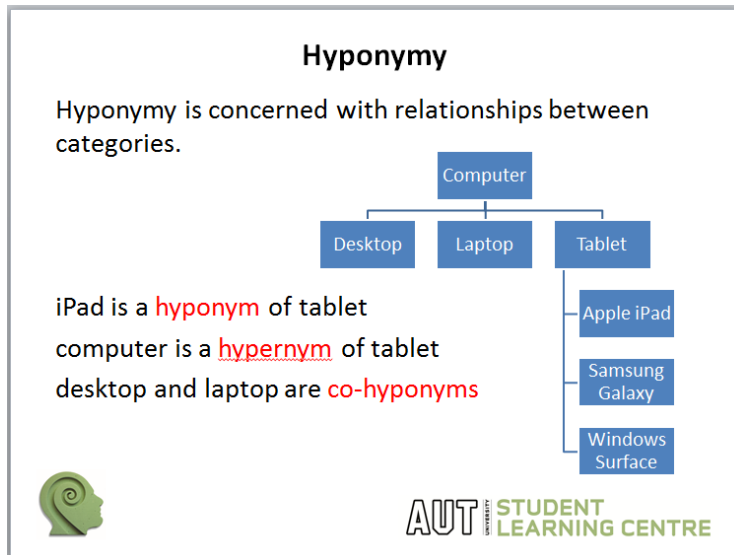


Figure 6. Original explanation of hyponymy

The information on the slide in Figure 6 was also revealed gradually. Firstly, the Learning Advisor would click to reveal the iPad item in the diagram and ask: “What is an iPad?”. This would lead to the tablet diagram item being shown next: “It’s a tablet.” This led to the next level up of the category: computer. Then, the students would be asked to name other types of computer and other types of tablet until the diagram was complete, as above. The concept of category was then addressed and examples of ‘hyponym’, ‘hypernym’, and ‘co-hyponym’ discussed. These last three terms were, on reflection, unnecessarily technical for the purposes of the EASI programme, with feedback indicating that the linguistic metalanguage was a hindrance to understanding for students.

Given that the programme was intended for all students (not just those interested in linguistics), much of the technical terminology was removed for the second Semester delivery round in order to make the content more accessible.

**Revised version: Semester 2, 2014**

When the Learning Advisor team reviewed the materials, their approach to introducing sense relations became less terminologically dense, and placed a stronger emphasis on the movement of ideas from general to specific as a guiding principle in good academic writing. This is shown in Figures 7 to 9:

### Hyponymy

This is about relationships between categories.

To make our writing flow logically, it is helpful to start with general ideas and then move to more specific ones.

For example, all of these items are types of:  
measuring tool

If we start with something specific, it might be hard for others to understand...






Figure 7. Introduction to hyponymy




### Tablets...

Let's look at this example:

*Tablets are an everyday item.*

What is the general topic?  
Is it medicines....  
... or computers?

Let's focus on computers...

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**STUDENT LEARNING CENTRE**

Figure 8. Starting with a word that is too specific

After introducing the teaching point and providing justification for writing in this particular sequence (Figure 9), an example was used to elicit that communication problems can occur if we begin with content that is too specific (Figure 8). At first, students could only see the example sentence: “Tablets are an everyday item”. Without context, it is impossible to decide if the overarching topic is medicines or computers, which the Learning Advisor elicits from the class by gradually revealing the images and asking which topic the students had been thinking about. This led to the slide redesigned from the previous version (Figure 9 below).

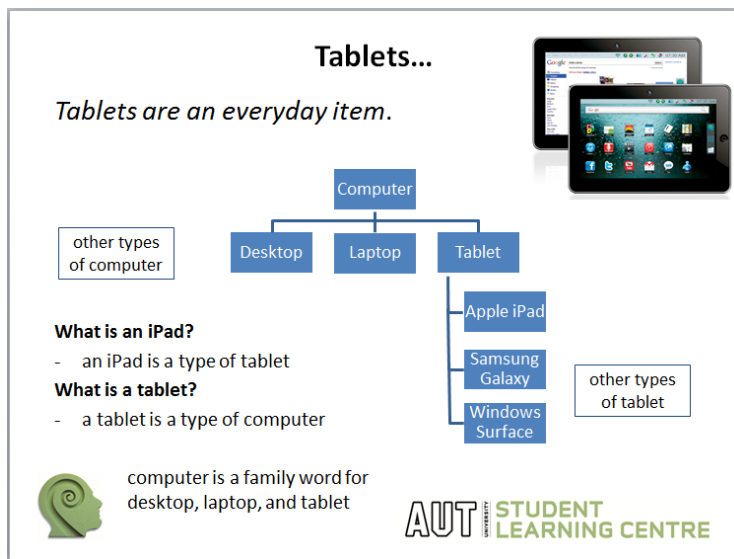


Figure 9. Updated explanation of hyponymy

In this version, the linguistic terminology was left out, and the categorical relationships were expressed in more familiar words. For the purposes of students in an EASI class, calling an iPad a ‘type’ of tablet is more valid than using the term, ‘hyponym’. Additional activities for students to solve similar categorically-confused examples, and to re-examine some of their own previous writing, would be desirable in order to provide students with opportunities to apply this knowledge practically. However, given the tightly-packed content of each EASI workshop, this could not be accommodated at the time. Nevertheless, as a key part of their role, Learning Advisors encourage students to review their own writing for particular lexico-grammatical features, and also to be sensitive to those patterns in the academic texts they read. This is a necessary area of feedforward for students from a variety of pre-existing knowledge and experience as they develop their academic literacies. Overall, the development

cycle enabled the design and modification of an academic English vocabulary workshop programme that the Learning Advisors were able to iteratively improve on with each new delivery

## **Discussion**

Following on from the reflections of the Learning Advisors involved, four main implications of the development and implementation of the vocabulary component of the EASI programme are apparent: (1) promoting the programme more widely and maintaining attendance levels; (2) the need for close collaboration between Learning Advisors and Faculty staff towards embedding vocabulary learning into course content; (3) targeting priority student groups; and (4) the challenge for Learning Advisors in developing a programme on top of their busy workload. The following section discusses each implication in turn.

### **Promotion and attendance**

Promotion of the EASI programme was through Faculty teaching staff, student services staff, and a combination of advertisements on University digital signage and hardcopy flyers. Attending students represented pre-degree, undergraduate and postgraduate levels. Attendance over the whole programme is somewhat uneven. Based on anecdotal accounts from students who have attended workshops, reasons for non-attendance are varied: conflicts between students' class timetables and the EASI workshop schedule; lack of awareness that EASI is available; shame at seeking out help for literacy support; and/or disengagement with tertiary study. Usually, it is the postgraduate students who attend the whole programme, engaging with content in sequence. Pre-degree and undergraduate students tend to drop in and out, with some starting after the first few weeks and therefore missing fundamentals. The late start is often motivated by raised self- or lecturer-awareness that the student has language issues; this can be detected through classroom interactions in the first few weeks of the semester, or early assignment work.

One option could be to offer a streamlined series of three workshops multiple times throughout the semester. Offering shorter bursts of workshops might also address

the other issue of pre-degree and undergraduate students not attending the whole programme. As these students need to commit to a regular two-hour workshop once a week for the first six weeks of semester, many ultimately reprioritise their commitment to extra-curricular study as assignments pile up and mid-semester exams approach. Therefore, a three week commitment may well appear more manageable. It would also be easy enough to make attendance at the first workshop a prerequisite for the second and third; as a result, the unevenness attendance currently experienced at the six workshop programme would be resolved.

Providing EASI workshops at times that suit student timetables and maintaining attendance levels throughout the programme has proven difficult. The 12 workshops are offered in two streams over the first six weeks of semester, with Workshops 7 to 12 building on Workshops 1 to 6. Intensive workshop programmes are also offered during the two weeks prior to start of each semester. Making the first six workshops a prerequisite for the second six was considered during the development of the programme. However, it was ultimately decided that attending Workshops 1 to 6 first should only be encouraged (not required), because Learning Advisors' workshops are additional to students' timetables and the EASI programme is not credit bearing. Students are therefore able to register for individual workshops, or all six within each stream. Registration for EASI workshops occurs online through the Learning Advisors' website. The online booking system enables Learning Advisors' staff to maintain records of attendance, increase class sizes as necessary, manage non-attendance, and contact students easily with updates.

An unfortunate outcome of being able to register for individual workshops is that students may miss essential content provided in earlier workshops and find later content confusing. Conversely, for those students who attend all of the workshops, having new arrivals to the class can be disruptive, because the Learning Advisor is required to repeat content for those who have not attended the previous workshops. As the Learning Advisors' team is attempting to offer the programme flexibly, this particular issue is a frustrating one. In future workshop planning, careful consideration will need to be given to sequencing of content and whether or not students should be able to register for individual workshops, or required to attend the entire programme.

A potential future direction could well involve renaming the programme altogether, without making specific mention of ‘English’; instead, the focus could be on communicating effectively in academic contexts. This may then make the programme more generally appealing, and preclude native English speakers, not to mention Māori and Pacific students, from perceiving the programme as being ‘not for me’ (see the third implication below for further discussion of targeting the programme to Māori and Pacific students).

### **Embedding vocabulary learning into course content**

Another way of fostering student commitment to programmes such as EASI would be to integrate them into the student learning experience. As mentioned in the introductory section of this paper, post-entry language assessment provides a systematic process for directing students to relevant resources and staff. Although the provision of academic English vocabulary learning at AUT remains ad hoc for the time being, it is clear that there is a need for a formal process that addresses student academic literacy development. Reintroducing the Vocabulary Diagnosis Tool (Nation & Beglar, 2007) developed at AUT and trialled in Faculties from 2008 to 2010 would provide a cost-effective means to assessing student academic language proficiency and serve as a clear route to relevant resources, such as the EASI programme or online resources. The diagnostic could be administered within programmes, leading towards effective embedding of vocabulary learning into subject content.

The linguistic and academic literacy diversity that characterises contemporary student enrolments clearly places the onus on institutions to not only teach subject content, but to also develop student academic literacies, including academic English vocabulary, through the provision of targeted support services based on assessed student needs. In combination with grammatical resources, the vocabulary component of programmes such as EASI have the potential to form an integral part of such a targeted provision; students could then engage more effectively with the technical vocabulary of their subject and the academic vocabulary that lecturers and authors use. Close collaboration between Learning Advisors and Faculty staff is essential if academic

literacies learning is to be integrated into course content (Baik & Greig, 2009; Gunn Hearne, & Sibthorpe, 2011; Wingate, Andon, & Cogo, 2011).

Learning Advisors should collaborate with Faculty lecturers to embed academic literacies development, including discipline specific vocabulary learning, into subject content right from the first semester. While this process may require considerable time for relevant staff to collaborate on adding vocabulary learning content to particular courses, the potential benefits for students' learning make it worthwhile. Over the span of a couple of semesters, it may also be possible for the Learning Advisors to gradually hand over responsibility for delivery of content to the Faculty lecturers. Rather than waiting to receive students from staff or self-referrals well into their studies, this 'front ending' of Learning Advisor activity in the student learning journey should increase the impact of our work, and is a model the AUT Learning Advisors team and Faculty members are increasingly beginning to implement (McWilliams & Allan, 2014; Macnaught & Bassett, 2016; Macnaught & McWilliams, 2016; Nikolai & Silva, 2014).

### **Targeting priority student groups**

Targeting particular student groups, such as Māori and Pacific students, may increase the impact of EASI. The programme was not initially aimed at any particular group in order to make it accessible to as many students as possible, whether English was their first language or not. However, given Māori and Pacific students represent two priority groups for the University sector as a whole, consideration should be given to increasing their participation, which has so far been low in the EASI programme.

Recent research into ethnic disparities in participation, retention and completion in New Zealand bachelor's qualifications has clearly indicated that Māori and Pacific students are far less likely to complete their degrees within five years (Meehan, Pacheco, & Pushon, 2017). For cohorts born between 1991 and 1994, 25.94% of Māori students and 36.04% of Pacific students pass less than half of their first year courses. This is in stark contrast to European students, for whom that proportion is 11.80% (Meehan, Pacheco, & Pushon, 2017). A programme such as EASI could contribute to improving these outcomes through raising Māori and Pacific students' awareness of what effective communication in academic contexts involves for each respectively.



If increased Māori and Pacific student participation in a language development programme such as EASI can improve pass rates within the first year of study for these student groups, a key focus for Learning Advisors surely must then be on how to get those students to register and attend in the first place. It is possible that the name of the programme itself dissuades some students; the inclusion of the word 'English' in particular may negatively influence perception of the purpose of the programme, and who it is for. Of course, the core purpose of the programme is to enhance student proficiency in communicating in academic settings. A name and promotional material that better convey this message to as many students as possible, including Māori and Pacific, may increase its appeal. Another useful action could also involve sourcing samples of student writing that indicate common language errors made by Māori and Pacific students in their written assignments. This would then enable Learning Advisors to develop and implement teaching materials and pedagogical approaches that are culturally and linguistically relevant.

How Learning Advisors team can implement new practices that are of benefit to these groups, as well as AUT students in general, will need collaboration with and input from additional staff. The original EASI development team comprised Learning Advisors who were either literacy experts and/or English language teachers, as well as staff from International Student Support and the School of Languages. It would also be prudent to consult with colleagues who possess relevant knowledge of Māori and Pacific world views in developing the programme further. This could also form part of the collaboration between Learning Advisors and Faculty staff towards effective embedding of academic literacies learning into subject content.

### **Developing and sharing resources across institutions**

Given the busy workload of Learning Advisors, developing a programme of workshops has proven to be a difficult task. The ongoing process of materials development by several Learning Advisors has been one of the highlights of our work in recent times. On top of day-to-day involvement with students, this has proven an especially rewarding experience in the context of restructuring processes that have been progressing at the same time. Therefore, in the interest of collegiality, the teaching materials and associated learning resources that the AUT Learning Advisors team have

generated since the inception of the EASI programme are available on request. We are happy to share these resources with our ATLAANZ colleagues at other institutions, with appropriate acknowledgement of AUT's intellectual property. Please direct enquiries to [learning-advisors@aut.ac.nz](mailto:learning-advisors@aut.ac.nz)

## **Conclusion**

Having noted that vocabulary development remains a neglected component of the tertiary experience for many students, this paper has argued that lexical awareness, coupled with an extensive vocabulary, are essential components of the multiple academic literacies required for success in study at this level. In support of this position, we have presented a case study outlining some of the theoretical and practical considerations relating to fostering vocabulary development at tertiary level. In response to increasing student linguistic diversity and widening participation in tertiary study, the AUT Learning Advisors team has created a targeted programme of academic English vocabulary learning workshops. The EASI programme has been developed in response to demand, in anticipation of an institution-wide strategy for assessing and facilitating student academic literacies development.

The rationale for focusing on this aspect of language acquisition is clear: vocabulary size points to reading and writing proficiency, therefore it is necessary for students to have an adequate academic vocabulary at the start of their tertiary education and to then increase this, as well as their discipline-specific vocabulary, with each successive year of study, if they are to succeed in their learning. It has become apparent to Learning Advisors that whether students are in their first year of undergraduate study, or close to completing a postgraduate programme, having sufficient vocabulary is by no means certain, or even common. Any gap between required vocabulary size and actual proficiency disrupts the student learning experience, which should trigger a dynamic institutional approach that provides systems for the assessment of student academic literacies, including vocabulary, and ongoing engagement between students and staff. Such engagement affords appropriate learning and teaching environments that foster student academic literacies development embedded into subject content.

In the absence of such a system for at least the present time, the EASI programme enables Learning Advisors at AUT to offer strategies for academic vocabulary learning that scaffold student awareness of the connection between lexis and grammar. Outcomes of the programme include increased confidence in listening to lectures, reading academic texts, speaking during and around class times, and constructing written assignments.

From a Learning Advisor perspective, the development and implementation of the vocabulary component of the EASI programme has been an enjoyable and rewarding experience for the team of materials developers and staff who teach the EASI modules. The teaching team meets regularly to review student uptake of the courses and engagement with materials; suggestions for different configurations are trialled, and resources constantly updated in response to feedback from students and teaching staff. When reflecting on the programme as a whole, four main implications for future development become apparent: firstly, promoting the programme and maintaining attendance levels is an ongoing challenge. Secondly, it is becoming increasingly clear that embedding vocabulary learning into course content is a worthwhile objective, notwithstanding the logistical challenges of establishing close collaboration between Learning Advisors and Faculty staff; therefore, embedding elements of the EASI programme into subject content for specific cohorts, informed by accurate diagnosis of student vocabulary size, is a desirable next step in the development of the programme. In terms of research potential, this could yield interesting insights into student academic literacies learning. Thirdly, while EASI was originally designed to cater for students at all levels, undergraduate and postgraduate, and from a diverse range of language backgrounds, including native speakers of English, it is clear that students ‘self-select’, and some, who would benefit from attending, do not perceive EASI’s relevance.

Therefore, it is our future intention to explicitly target the programme at priority student groups. Finally, the collegial benefits of developing such a programme outweigh other considerations, and tend to result in more focused attention on pedagogical principles of design, and on clear articulation of learning outcomes. An additional benefit relates to the goal of sharing teaching and learning resources across institutions, a recurrent theme in annual meetings of the ATLAANZ community.

## References

- Aarts, B. (2014). Colligation. In *The Oxford dictionary of English grammar* (2nd ed.) Retrieved from <http://www.oxfordreference.com>
- Academic English Language Requirement*. (n.d.). Retrieved July 9, 2017, from <https://www.auckland.ac.nz/en/for/current-students/cs-academic-information/aclr.html#ea165cac47251d0512f4683baefb5f5b>
- Aitchison, J. (1987). *Words in the mind: An introduction to the mental lexicon*. Oxford, England: Blackwell Publishers.
- Allan, Q. (1999). Enhancing the language awareness of TeleNex teachers through corpus data. *Journal of Technology and Teacher Education*, 6(4), 57-74.
- Allan, Q. (2002). The TELEC secondary learner corpus: A resource for teacher development. In S. Granger, J. Hung, & S. Petch-Tyson (Eds.), *Computer learner corpora, second language acquisition and foreign language teaching* (pp. 195-211). Amsterdam, Netherlands: John Benjamin.
- Allan, Q. (2013). *Workshop: Introducing grammar as a communicative resource*. Presented at the meeting of the Association of Tertiary Learning Advisors of Aotearoa/New Zealand Conference, Eastern Institute of Technology, Napier, New Zealand.
- Allan, Q. (2014). Introducing grammar as a communicative resource: A functional approach. In H. Martin & M. Simkin (Eds), *Hikina te Manuka! Learning Connections in a Changing Environment: Proceedings of the 2013 Annual International Conference* (pp.19-37). Napier, New Zealand: Association of Tertiary Learning Advisors of Aotearoa/New Zealand (ATLAANZ).
- Baik, C., & Greig, J. (2009). Improving the academic outcomes of undergraduate ESL students: The case for discipline-based academic skills programs. *Higher Education Research & Development*, 28(4), 401-416. doi: 10.1080/07294360903067005
- Beglar, D. (2010). A Rasch-based validation of the Vocabulary Size Test. *Language Testing*, 27(1), 101-118. doi: 10.1177/0265532209340194
- Benson, P. (2001). *Autonomy in language learning*. Harlow, England: Longman.
- Bassett, M. & Allan, Q. (2017). English for academic skills independence: Focus on vocabulary. *ATLAANZ Journal* 2(1): 36-67.

- Biber, D., & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26, 263-286. doi: 10.1016/j.esp.2006.08.003
- Bourdieu, P. (1993). *The weight of the world: Social suffering in contemporary society*. Stanford, CA: Stanford University Press.
- Browne, C. (2013). The New General Service List: Celebrating 60 years of vocabulary learning. *The Language Teacher*, 37(4), 12-16. Retrieved from [http://jalt-publications.org/files/pdf/the\\_language\\_teacher/37.4tlt.pdf](http://jalt-publications.org/files/pdf/the_language_teacher/37.4tlt.pdf)
- Cobb, T. (n.d.) *Lextutor online concordancer*. Retrieved from <http://www.lexutor.ca/conc/>
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238. doi: 10.2307/3587951
- Coxhead, A. (2012). Academic vocabulary, writing and English for academic purposes: Perspectives from second language learners. *RELC Journal*, 43(1), 137-145.
- Coxhead, A. (2016). Acquiring academic and disciplinary vocabulary. In P. Shaw & K. Hyland (Eds.), *The Routledge handbook of English for academic purposes*. Abingdon, England: Routledge.
- Davies, M. (n.d.). *Corpus of contemporary American English (COCA)*. Retrieved from <http://www.wordandphrase.info/academic/frequencyList.asp>
- Flowerdew, L. (2015). Using corpus-based research and online academic corpora to inform writing of the discussion section of a thesis. *Journal of English for Academic Purposes*, 20, 58-68. doi:10.1016/j.jeap.2015.06.001
- Folse, K. (2004). *Vocabulary myths: Applying second language research to classroom teaching*. Ann Arbor, MI: University of Michigan Press.
- Gee, J. P. (1996). *Social linguistics and literacies: Ideologies in discourses* (2nd ed.). London, England: Routledge.
- Global language monitor*. (2014). Retrieved from <http://www.languagemonitor.com/number-of-words/number-of-words-in-the-english-language-1008879/>
- Bassett, M. & Allan, Q. (2017). English for academic skills independence: Focus on vocabulary. *ATLAANZ Journal* 2(1): 36-67.

- Gunn, C., Hearne, S., & Sibthorpe, J. (2011). Right from the start: A rationale for embedding academic literacy skills in university courses. *Journal of University Teaching & Learning Practice*, 8(1), 1-9. Retrieved from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1159&context=jutlp>
- Halliday, M. (1985). *An introduction to functional grammar*. London, England: Edward Arnold.
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2013). *Halliday's introduction to functional grammar*. Abingdon, England: Routledge.
- Hase, S., & Kenyon, C. (2007). Heutagogy: A child of complexity theory. *Complicity: An International Journal of Complexity and Education*, 4(1), 111-118. Retrieved from <https://ejournals.library.ualberta.ca/index.php/complicity/article/view/8766/7086>
- Hocking, D., & Fieldhouse, W. (2011). Implementing academic literacies in practice. *New Zealand Journal of Educational Studies*, 46(1), 35-46. Retrieved from [www.proquest.com](http://www.proquest.com)
- Hyland, K. (2009). *Academic discourse*. London, England: Continuum International Publishing Group.
- Jordan, R. (1997). *English for academic purposes: A guide and resource book for teachers*. Cambridge, England: Cambridge University Press.
- Knoch, U. (2009). Diagnostic assessment of writing: A comparison of two rating scales. *Language Testing*, 26(2), 275-304. doi: 10.1177/0265532208101008
- McEney, T., & Xiao, R. (2011). What corpora can offer in language teaching and learning. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 364-380). New York, NY: Routledge. Retrieved from <http://ezproxy.aut.ac.nz>
- McLeod, S. (2010). Sensorimotor stage. *Simply Psychology*. Retrieved from <http://www.simplypsychology.org/sensorimotor.html>
- McWilliams, R., & Allan, Q. (2014). Embedding academic literacy skills: Towards a best practice model. *Journal of University Teaching & Learning Practice*, 11(3). Retrieved from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1477&context=jutlp>
- Bassett, M. & Allan, Q. (2017). English for academic skills independence: Focus on vocabulary. *ATLAANZ Journal* 2(1): 36-67.

- Macnaught, L., & Bassett, M. (2016, November). *From stickies to threads: The collaborative design of embedded academic literacies*. Paper presented at The Association of Tertiary Learning Advisors of Aotearoa New Zealand (ATLAANZ) Conference, Lincoln University, New Zealand.
- Macnaught, L., & McWilliams, R. (2016, November). *Writing in semantic waves: Supporting students to connect concrete experiences and abstract concepts*. Paper presented at The Association of Tertiary Learning Advisors of Aotearoa New Zealand (ATLAANZ) Conference, Lincoln University, New Zealand.
- Meehan, L, Pacheco, G., & Pushon, Z. (2017). *Explaining ethnic disparities in bachelor's qualifications: Participation, retention and completion in NZ* (New Zealand Productivity Commission Working Paper 2017/01). Retrieved from <http://www.productivity.govt.nz/sites/default/files/Meehan%20Pacheco%20Pushon%20working%20paper%209%20Feb%202017.pdf>
- Milton, J. (2009). *Measuring second language vocabulary acquisition*. Bristol, England: Multilingual Matters.
- Morgan, J., & Rinvoluceri, M. (1987). *Vocabulary*. Oxford, England: Oxford University Press.
- Nation, I. (2001). *Learning vocabulary in another language*. New York, NY: Newbury House.
- Nation, I. S. P. (2011). Research into practice: Vocabulary. *Language Teaching*, 44(4), 529-539. doi: 10.1017/S0261444811000267
- Nation, P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher*, 31(7), 9-13.
- Nikolai, J. & Silva, P. (2014, November). *Structuring an appropriate academic support strategy to assist Bachelor of Sport and Recreation (BSR) students to meet the BSR graduate profile*. Paper presented at The Association of Tertiary Learning Advisors of Aotearoa New Zealand (ATLAANZ) Conference. Auckland, New Zealand.
- Oxford Dictionaries. (n.d.). *The English language: How many words are there in the English language?* Retrieved from <http://www.oxforddictionaries.com>
- Bassett, M. & Allan, Q. (2017). English for academic skills independence: Focus on vocabulary. *ATLAANZ Journal* 2(1): 36-67.

- Rosch, E. H. (1973). Natural categories. *Cognitive Psychology*, 4, 328-350. doi: 10.1016/0010-0285(73)90017-0
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford, England: Oxford University Press.
- Storch, N. & Tapper, J. (2009). The impact of an EAP course on postgraduate writing. *Journal of English for Academic Purposes*, 8(3), 207-223.
- Tertiary Education Commission. (2010). *Educational performance in tertiary education*. Retrieved from <http://www.tec.govt.nz/Learners-Organisations/Learners/performance-in-tertiary-education/>
- The Economist*. (2013). Lexical facts: Vocabulary size [blog post]. Retrieved from <http://www.economist.com/blogs/johnson/2013/05/vocabulary-size>
- Thomas, L. (2002). Student retention in higher education: The role of institutional habitus. *Journal of Education Policy*, 17(4), 423-442. doi: 10.1080/02680930210140257
- Thomas, L., & Tight, M. (Eds.). (2011). *Institutional transformation to engage a diverse student body*. Bingley, England: Emerald.
- Thomas, S. L. (2000). Ties that bind: A social network approach to understanding student integrations and persistence. *Journal of Higher Education*, 71(5), 591-615. doi: 10.2307/2649261
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational characteristics of student persistence. *Journal of Higher Education*, 68(6), 599-623. doi: 10.2307/2959965
- Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education*, 12(1), 69-81. doi: 10.1177/1469787410387814
- Wray, A. (2002). *Formulaic sequences and the lexicon*. Cambridge, England: Cambridge University Press.
- Bassett, M. & Allan, Q. (2017). English for academic skills independence: Focus on vocabulary. *ATLAANZ Journal* 2(1): 36-67.