

*Article*

# **Current Issues and Future Research on Teaching and Learning of Academic Vocabulary in EMI Contexts**

**Averil Coxhead**

Victoria University of Wellington, New Zealand

Received: 5 April, 2023/Accepted: 5 May, 2024/Published: 9 July, 2024

## **Abstract**

Academic vocabulary is a key element of spoken and written texts for educational purposes. This vocabulary can both support the content of academic texts (in the case of general academic vocabulary) and carry content (in the case of specific academic vocabulary). Two issues related to this lexis are discussed in this article: (1) how we define and characterize academic vocabulary and (2) how written and spoken academic vocabulary can be similar but also different. Suggestions for future research in academic vocabulary in EMI contexts include more analysis of written and spoken input in EMI contexts; undertaking longitudinal studies of academic vocabulary use in speaking and writing; and investigating assessment and growth of academic vocabulary knowledge.

## **Keywords**

Academic vocabulary, multiword units, EMI, spoken, written

## **1. Introduction**

Academic vocabulary is a crucial element in spoken and written texts for EMI. Richards and Pun (2022, p. 100) point out that it is crucial to EMI "...as a resource for thinking and understanding in a discipline, i.e., for developing conceptual processes and understanding". They also note its importance for engaging with disciplines and for understanding. Academic vocabulary can be supportive of the subject or content of academic texts or carry content. This paper draws attention to how we might define and characterize academic vocabulary and similarities and differences in written and spoken academic vocabulary. It also suggests some avenues for future possible research including analysis of written and spoken input in EMI contexts; more longitudinal studies of learners' use of academic vocabulary in speaking and writing; and assessing knowledge and growth of this lexis.

## **2. Issues In Academic Vocabulary**

The first issue to explore is how academic vocabulary is defined and what it encompasses. Academic vocabulary is an umbrella term which includes general and specific lexis, as well as single and multiword

items (e.g. *kinetic energy* in physics and *periodic table* in chemistry; Green & Lambert, 2019). General academic vocabulary can occur across a wide range of academic subjects (e.g. *factors, issues, major*) and tends not to be closely related to the content of a particular field (Coxhead, 2000). On the other hand, specific academic vocabulary is content carrying and closely related to the disciplinary subject. Academic vocabulary can be a barrier for low proficiency students in English because of the large amount of technical vocabulary in EMI courses (Rose et al., 2020). A fairly common misconception about academic vocabulary is that it is made up of largely low frequency, very technical lexis. But academic vocabulary can be high, mid or low frequency (Nation, 2022). For example, *blood* is in the 1<sup>st</sup> 1,000 word families of Nation's (2017) British National Corpus/Corpus of Contemporary American English (BNC/COCA) frequency-based word lists but it also occurs in the Biology Secondary School Vocabulary List (Green & Lambert, 2018). *Value* is in the 2<sup>nd</sup> 1,000 BNC/COCA word list (Nation, 2017) and also occurs in both the Math (as a noun) and Economics (as a verb) Secondary School Vocabulary Lists (Green & Lambert, 2018). (Go to [https://www.laurenceanthony.net/project\\_nation/](https://www.laurenceanthony.net/project_nation/) for a cell phone app that locates words in the Nation (2017) BNC/COCA lists). That said, there is a strong Graeco-Latin influence in academic vocabulary in English. Just over 80% of the 570 headwords in the Academic Word List (Coxhead, 2000) are Graeco-Latin in origin. Learners whose first or second (or even third) language is Romance-based (e.g. French; Italian) or heavily influenced by Latin and/or Greek (e.g. Russian) will have a clear advantage over learners whose roots belong in other languages (e.g. Thai; Japanese). This point is particularly important when we consider the possible language backgrounds of EMI learners in this special issue in countries such as Taiwan, Vietnam and Thailand.

A second issue is that academic vocabulary for speaking/listening shares some similarities with academic vocabulary for reading/writing but there are also differences. One similarity is the importance of having a large vocabulary size to help cope with understanding and producing academic texts. Proficiency can affect the strategies learners use to deal with academic texts. For example, lower proficiency EMI learners might struggle with comprehending academic reading and listening input and resort to strategies such as word-by-word translation which can further inhibit comprehension of a whole message (Rose et al., 2020). Another similarity is that high frequency vocabulary represents a high proportion of vocabulary in academic written and spoken texts but knowledge of this lexis in a range of contexts may not be strong or deep (e.g. Dang, 2020 in Vietnam; Matthews & Cheng, 2015 in China). That said, knowledge of academic vocabulary can grow over time with support, exposure, and practice (Coxhead & Boutorwick, 2018). Spoken academic texts contain a higher proportion of high frequency vocabulary than written academic texts (see Dang et al., 2020; Dang et al., 2017; Coxhead et al., 2017). Further, general academic vocabulary can make up between 10-14% of academic written texts (see Gardner & Davies, 2014; Coxhead, 2000) but the Academic Spoken Word List (Dang et al., 2017) covers over 90% of spoken academic texts.

### 3. Suggestions For Future Research

The following suggestions are grouped into several main areas of research: (1) analysis of written and spoken input in EMI contexts; (2) longitudinal studies of academic vocabulary use in speaking and writing; and (3) assessment of academic vocabulary knowledge. Several of the papers in this special issue overlap to some extent with these suggestions. Note that there are two useful volumes on EMI: Pun and Curle (2021), which covers research methods in EMI, and Curle and Pun (2023), which specifically focuses on qualitative approaches in EMI research.

Firstly, it is important to find out more about the nature and use of general and subject-specific academic vocabulary in EMI textbooks and teaching materials (see Jablonkai, 2021 for more on corpus-based methodology in EMI contexts). This research could involve mixed methods. For example, Coxhead et al. (2017) investigated multiword units in two spoken academic corpora (tutorials and

laboratories) and compared these findings with recommendations from ESP/EAP textbooks. They also interviewed university lecturers and students with English as a second or foreign language about the purpose of speaking in a university context.

A second area of possible future research focuses on EMI learners' use of general and academic vocabulary in spoken and written output both over time and in different subject areas in EMI. Research into academic multiword units in learner output would also be valuable. Classroom-based studies could, for example, focus on the use and negotiation of general and specific academic vocabulary in teacher and student interactions in vocabulary-related episodes (VREs) (see [Basturkmen & Hong, 2023](#)).

Finally, assessment of general and specific academic vocabulary knowledge over time is important, but needs to take into account the strengths and potential weaknesses of a range of learners (see [Marianne & Coxhead, 2023](#)). It is good to see tests being developed, trialed, and used for general academic vocabulary (see [Pecorari, Shaw & Malmström, 2019](#)), but there is much more to be done in subject-specific academic vocabulary.

## References

- Basturkmen, H., & Hong, J. (2023). Development and application of the framework for the analysis of vocabulary language-related episodes. In F. Costa & C. Mariotti (Eds.). *Input in English-Medium Instruction* (1<sup>st</sup> ed., pp. 26–39). Routledge.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34 (2), 213–238.
- Coxhead, A. & Boutorwick, T.J. (2018). Longitudinal vocabulary development in an EMI international school context: Learners and texts in EAL, Maths and Science. *TESOL Quarterly*, 52, 3, 588–610.
- Coxhead, A. Dang, Y. & Mukai, S. (2017). Single and multi-word unit vocabulary in university tutorials and laboratories: Evidence from corpora and textbooks. *English for Academic Purposes*, 30, 66–78.
- Curle, S. & Pun, J. (Eds.) (2023). *Qualitative research methods in English Medium Instruction for emerging researchers: Theory and case studies of contemporary research*. Taylor & Francis.
- Dang, T. N. Y. (2020). *High-frequency words in academic spoken English: Corpora and learners*. *ELT Journal*, 74(2), 146–155. <https://doi.org/10.1093/elt/ccz057>
- Dang, Y., Coxhead, A. & S. Webb. (2017). The Academic Spoken Word List. *Language Learning* 67(3), 959–997.
- Dang, T. N. Y., Coxhead, A. & Webb, S. (2020). Vocabulary in academic spoken English. *New Zealand Studies in Applied Linguistics*, 26,1, 1–16.
- Gardner, D., & Davies, M. (2014). A new academic vocabulary list. *Applied Linguistics*, 35, 3, 305–327.
- Green, C. and Lambert, J. (2018). Advancing disciplinary literacy through English for Academic Purposes: Discipline-specific wordlists, collocations and word families for eight secondary subjects. *Journal of English for Academic Purposes*, 35, 105–115.
- Green, C. and Lambert, J. (2019). Position vectors, homologous chromosomes and gamma rays: Promoting disciplinary literacy through Secondary Phrase Lists. *English for Specific Purposes*, 53, 1–12.
- Jablonkai, R. (2021). Corpus linguistic methods in EMI research: A missed opportunity? In J. Pun & S. Curle. (Eds.) *Research methods in English Medium Instruction* (pp. 92–106). Taylor & Francis.
- Marianne & Coxhead, A. (2023). Getting to know your learners in an EAL context: Speed bumps and sweet spots. In G. Brooks, J. Clenton & S. Fraser (Eds.). *EAL research for the classroom* (pp. 185–207). Routledge.
- Matthews, J., & Cheng, J. (2015). Recognition of high frequency words from speech as a predictor of L2 listening comprehension. *System*, 52, 1–13.

- Nation, I.S.P. (2017). The BNC/COCA Level 6 word family lists (Version 1.0.0) [Data file]. Available from <http://www.victoria.ac.nz/lals/staff/paul-nation.aspx>
- Nation, I. S. P. (2022). *Learning vocabulary in another language* (3<sup>rd</sup> edition). Cambridge University Press.
- Pecorari, S., Shaw, P. & Malmström, H. (2019). Developing a new academic vocabulary test. *Journal of English for Academic Purposes*, 39, 59–71.
- Pun, J. & Curle, S. (Eds.) (2021). *Research methods in English Medium Instruction*. Taylor & Francis.
- Richards, J. & Pun, J. (2022). *Teaching and learning in English Medium Instruction*. Routledge.
- Rose, H., Curle, S., Aizawa, I. & Thompson, G. (2020). What drives success in English medium taught courses? The interplay between language proficiency, academic skills, and motivation, *Studies in Higher Education*, 45, 11, 2149–2161.

**Averil Coxhead** is a Professor in Applied Linguistics and Head of School of Linguistics and Applied Language Studies. She teaches courses MA in Applied Linguistics/TESOL programmes and supervises postgraduate research in a range of areas. Averil's current research includes specialised and academic vocabulary in the trades, at university and secondary school.