Vocabulary Learning Strategies: Learning Engineering Terminology Among Engineering Majors for Industry 4.0 Readiness

Amri Muaz Azmimurad*, Najah Osman b,

a: Centre for Modern Languages & Human Sciences, Universiti Malaysia Pahang, 26600 Pekan, Pahang Darul Makmur, Malaysia; amrimuazz@gmail.com
b: Centre for Modern Languages & Human Sciences, Universiti Malaysia Pahang, 26600 Pekan, Pahang Darul Makmur, Malaysia; najahosman@ump.edu.my

*Corresponding Author Email: amrimuazz@gmail.com

Abstract

It is imperative in the era of industry 4.0 that scholars including engineers and practitioners to communicate effectively through mastering technical vocabulary in their specializations. The use of strategies in learning vocabulary has been proven to have a significant impact on the process of learning vocabulary. Nevertheless, it was found that advance learning is insufficient, and the digitization era requires more words to be mastered to have clear communication. Hence, this research aims to discover the strategies used among engineering majors in learning engineering terminology. This research employed mixed methods consisting of both quantitative and qualitative approach. The instruments of this research are, a vocabulary learning strategies questionnaire and semi-structured interviews. The questionnaires were administered to 150 students majoring in engineering from five engineering clusters. This research found that engineering students employed determination and metacognitive strategies most frequently. The most frequently used strategy was found to be listening and watching English media while the least frequently used strategy was keeping a vocabulary notebook. Findings show that future communication should focus on interactivity of the media used to increase the proficiency of technical vocabulary and the Malaysian government can drive industry 4.0 though strategies identified in this study.

Keywords: Engineering Terminology, Explicit Learning Theory, Industrial Revolution 4.0, Technical Vocabulary, Vocabulary Learning Strategies