An IRT-based Model of Word Difficulty among ESP College Students

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ABSTRACT

Academic vocabulary difficulty encountered among adult foreign language learners was investigated using Item Response Theory (IRT) analysis. A total of 238 Chinese-speaking ESP (English for Specific Purposes) college students were examined on a series of four vocabulary translation tests. It is found that the dichotomous one-parameter Rasch model is reasonably effective in assessing word difficulty. The findings show that word characteristics such as word length, phonetic distractability and imageability are underlying predictors of word difficulty among adult learners. It is evident that both learner proficiency and word difficulty in English affect learners ' translation performance. Further research is necessary to discriminate between the effects of word features and human factors. Pedagogical implications are discussed for the importance of teaching material selection and vocabulary learning strategy use in English vocabulary instrument.

Keywords: Item Response Theory, Word Difficulty, English for Specific Purposes

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