Vocabulary Learning of Intermediate ESL Students

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Abstract

This paper seeks to report on a research study conducted at the Program of Intensive English (PIE) at Northern Arizona University (NAU). The project investigated the progress of vocabulary learning of PIE reading and writing level 3 students, who are enrolled to do intensive study in English at NAU. L2 learning research has revealed that knowledge of vocabulary is crucial for reading comprehension and students have to demonstrate enough vocabulary knowledge and the ability to function in an academic setting before they can gain admission into a university with an English medium of instruction. The study conducted assessed students’ progress on vocabulary knowledge, vocabulary comprehension, and use of learnt words in their own grammatical sentences to demonstrate knowledge of their meaning. These students speak English as a foreign language in their home countries, and they all held immigrant student visas to study in U.S. Their aim upon completing the intensive study of English is to pursue studies in various programs and majors at NAU. The test confirmed students’ language abilities and it is aimed at providing insights to different strategies and approaches to teaching of vocabulary at PIE.

Keywords: vocabulary learning, assessment
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Background

Research studies in vocabulary learning reveal that vocabulary is predictive for performance on reading comprehension. Schmitt (2008) noted that a large vocabulary is necessary to function in English. English foreign and second language students who wish to pursue their studies at NAU need to demonstrate enough vocabulary knowledge and abilities to function in an English academic setting before they can gain admission in most academic programs. It is for this reason that a vocabulary test was developed to assess the progress of vocabulary learning of PIE level 3 students in the reading and writing course. The results of the test may subsequently inform the effectiveness of the instruction of PIE on vocabulary learning in reading and writing course.

As previously mentioned, the vocabulary test for the (PIE) level 3 students was developed to evaluate the progress they are making in the development of their vocabulary knowledge. The test questions were based on an authentic passage taken from one of the students’ prescribed reading and writing textbooks. Thus, the test developers, also authors of this paper, followed pedagogical principles of contextualizing the test question, basing them on learnt material, evaluating progress in order to bring about positive impact on the teaching of vocabulary skills in the PIE. This would help the international English foreign and second language speaking students make self-assessment on whether they are making progress in their learning or not, as vocabulary plays an important role in academic achievement (Saville-Troike, 1984).
Research Methods

Participants of the vocabulary test consisted of ten intermediate PIE level 3 ESL internationals registered in the reading and writing module. Test takers’ gender was mixed; eight males and two females. Their Native languages ranged from Brazilian Portuguese, Chinese, Arabic and French. The students were enrolled in the PIE to do an intensive study in English before they could be registered in full-time studies at NAU.

The vocabulary test was a formative assessment and the test type was achievement. The test was intended to enhance learning and instruction in order to meet the students’ needs and it was administered to individual students. The table of specifications or the test blueprint as explained in Miller, Linn, and Grondlund (2012), guides the design of the test by showing the number of items in the test, the tasks to be assessed, and the percentages, which will be allotted to each test task and instructional objectives.

For this vocabulary test project, the test blueprint consists of three sections of general instructional objectives, which assessed cognitive abilities of test takers (viz.), Knowledge, Comprehension and Application, with an allotment of 33.3% each. Thus, in Section 1, ten items assessed guessing words in context using multiple choice test items; further, ten items assessed the ability of test takers to match target words with meanings in matching type questions for Section 2. And in Section 3, five items assessed vocabulary use in own sentences, which were split into two parts with sub-constructs testing meaning and grammar. Therefore, test takers were required to use the vocabulary words to compose own sentences following an example. Accordingly, the test comprised of ten points totaling to thirty points with the total number of items as thirty.
The instructions of the test were given in English through visual and aural channel. The specific procedures and tasks were briefly explained in writing and orally. The questions in the three sections of the test were based on a passage taken from unit 10 of *Pathways 2: Reading, Writing and Critical Thinking* by Blass & Bargo (2013), which is a prescribed reading and writing textbook for the level 3 (intermediate) classes in the PIE at Northern Arizona University and that had been treated with the students in their class.

Since sections one and two were objective type of question items and the test takers were required to record all their responses on the test paper itself, a separate answer key was made and used to compare their correct answers on their test papers to the answer key (Miller et al., 2012). A partial scoring procedure as applied to score section three since two criteria for correctness were required for the correct answer; namely, grammar and meaning.

The test was administered in the classroom in the daytime. On November 13, 2013 at PIE to 10 reading and writing course students. All students gave consent to take the test. The test took place during normal class time for duration of 40 minutes.

**Results**

As mentioned earlier, the test comprised of 30 items divided into 3 sections. One item was automatically removed from the statistical analysis because all the students got the item correct. Item difficulty (index $D$) ranged from .10 to .90, also, the difficulty index $P$ revealed that two items had a negative discrimination value, which is a candidate for elimination from the future item bank. The ideal range of the item difficulty for a dichotomous test is .25 to .75. Only 12 out of items had a ideal range of difficulty level (between 25 and .75). Thirteen items had a difficulty index of above .80. Two items For discrimination, three items were below .30, and all other items had discrimination index of above .30 except for two items.
For descriptive statistics, test takers were 10 students and the test consisted of 30 questions. The minimum scores scored were seven and maximum scored scores was 28. The mean score for the test was 19.6 and the standard deviation was 6. The reliability coefficient (Cronbach’s alpha) is .90 and the Standard Error of Measurement (SEM) is 2. Most students got the items on the test correct, and thus, the curve is negatively skewed.

Relevance to PIE

The test was designed to determine students’ progress and how they could be assisted in the development of their vocabulary. It showed the students’ progress and confirmed the students’ actual performance in class. The level 3 reading and writing teacher confirmed that the test showed consistency in terms of the students’ performance. The students who performed well in the test are the students who are strong students and those who performed poorly are weak students in class. Students who need extra help could be assisted on strategies and techniques of learning and developing their vocabulary knowledge.

Since our test was a norm referenced test, we do not have masters or non-masters, but in general students performed well in this test. Thus, we did not have a normal distribution of the curve, but a negatively skewed curve. According Douglas (2000), norm referenced tests are designed to distinguish “among test takers so as rank them with respect to the ability being tested”. As indicated, the test we administered was not a high stakes test in order to use the scores, but for interpretation. The students’ performance on the vocabulary test was used by the reading and writing instructor to monitor the effectiveness of the class instruction. Chapelle, Enright, and Jamieson (2008, p. 12) asserted that score interpretations “should be linked theoretical construct” as such the scores obtained by students in our test were linked to vocabulary knowledge, comprehension, and application.
The test results confirmed our hypotheses that section 1 would be easier, section 2 moderate, and section 3 difficult. The test items and content were fair and familiar to all the students as it was based on their prescribed reading and writing syllabus, and they had been taught about the reading passage. The test results were helpful to the reading and writing instructors to reflect on their methods and techniques of vocabulary instruction. The instructor took the decision to help students who had challenges in the different sections of the test.

In conclusion, the skills demonstrated in the test could be applied in the academic TLU domain as shown by the test takers’ ability to guess meanings from context, match words with their explanation, and construct own sentences using words they have been taught in class. The test proved to measure the students’ abilities as stipulated by the construct definition. Test records such as students’ scripts were used as evidence to indicate test takers’ language ability. Thus, the test achieved its purpose of assessing the students’ progress in vocabulary knowledge, comprehension and application by using words in own sentences. Adequate knowledge of words is a prerequisite or effective language use, for this reason, a vocabulary test for PIE students was justifiable for students who aspire for admission to academic studies at NAU. Moreover, knowing, understanding, and using academic vocabulary words would help these students cope with the academic demands of graduate studies.
References


