

TEACHING VOCABULARY WITH A SUPPLEMENTARY TEXTBOOK: “*DAHANI DAHANAI* LEARNING ENGLISH” TO IMPROVE STUDENT’S ACADEMIC ACHIEVEMENT

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Abstract

The aim of this quantitative research is to measure the effectivity of the developed supplementary English textbook in improving the student’s academic achievement through vocabulary learning. The participants are 51 seventh graders students of SMPN 1 Gunung Bintang Awai. This is a pre-experimental study hence only one group is involved. The samples received the treatment: learning English vocabulary using task-based *Dahani Dahani* Learning English textbook for three weeks with total 6 sessions. Two identical tests were prepared as the pretest and posttest to record the student’s score before and after the treatment. The data received from the instruments were compared and analyzed with paired sample t-test and N-gain score test. The t-test found that the improvement in score is significant, with sig. value 0.000, which is less than 0.05. Whereas the N-gain score test revealed a modest gain with a g. value of 0.31. This signifies that the product has a moderate impact on kids' academic progress.

Keywords: Vocabulary, Local Content, Academic Achievement.

INTRODUCTION

Vocabulary knowledge has been considered as a prerequisite skill that must be learned in order to improve other linguistic skills (Roche & Harrington, 2013). As a result, studying vocabulary may be viewed as the first stage before mastering the four abilities. However, for the sake of grammar and other aspects of language, vocabulary was ignored in language instruction programs and curriculums. It was often given little priority in language programs and was left with just occasional attention in textbooks and language programs (Amiryousefi & Dastjerdi, 2010).

In Indonesia, the lack of vocabulary became one of serious challenges for English

teacher (Mumary Songbatumis, 2017). It weakens the student’s capability to learn, thus the teacher hardly delivers any material. Poor performed due to students could easily confuse in English learning and confusion becomes a frustration that leads them to boredom due to persistent failure to comprehend the material. Moreover, Handayani (2016) suggested that the primary textbook that is currently being used to teach English for the seventh graders: “When English Rings A Bell 7”, needs to provide more vocabulary items. Poor performed students could easily confuse in English learning. Confusion becomes a source of frustration, which leads to boredom because of their inability to grasp the material repeatedly (Graesser & D’Mello, 2012). Moreover,

Handayani (2016) suggested that the primary textbook that is currently being used to teach English for the seventh graders: “When English Rings A Bell 7”, needs to provide more vocabulary items. This means she agreed that the textbook lacks attention on vocabulary.

Due to that, it is important to have supplementary textbook that is specialized on vocabulary teaching and suitable for the students. The *Dahani Dahanai* Learning English textbook was developed to answer the challenge. The development followed ASSURE (Analyze Students, State Standards and Objectives, Select Strategies, Technology, Media, and Materials, Utilize Technology, Media, and Materials, Require learner participation, Evaluate and Revise) model concept (Heinich et al., 2002). ASSURE is a technology-oriented development specialist approach which employs a standard research-based approach to lesson design that is likely to be applicable to any school or district lesson plan pattern (Ibrahim, 2015).

The textbook adopted Task-Based Language Teaching (TLBT) which encourage the locally produced and learner defined material (Long, 2015). Thus, the development, the content, the design and the material were fully based on the need analysis on the target student: The seventh graders student in SMPN 1 Gunung Bintang Awai. Furthermore, this textbook highlighted local content and multimodality as primary features to maximize the acceptability and the language exposure to improve the student’s academic achievement.

When the product is fully constructed, it is vital to ensure the effectiveness of the book since textbook quality and compatibility are among the most critical factors that influence the student’s academic achievement (Sievrt et al., 2021; van den Ham & Heinze, 2018). Steinmayr et al., (2014) stated that academic achievement refers to performance results that

demonstrate how far a person has progressed in learning at school, college, and university.

This research is part of “Evaluate and Revise” in ASSURE. It means the effectivity of the developed product in improving students’ academic achievement would be tested and evaluated. To assess the improvement, grades or standardized test results can be used as indicators of academic success (Findley & Cooper, 1983). So, quantitative measurement of pretest and posttest is suitable find out the effectivity.

MATERIALS AND METHOD

The English instructor deployed the product at SMPN 1 Gunung Bintang Awai. It was used to teach English in classes VII A, VII B, and VII C for three weeks, totaling six meetings or twelve learning hours each class. Pretest was given on September. The implementation of the product began on November 14th and concluded on December 3rd, 2022. Posttest then followed on December 4th. Total sample was used hence entire population; 51 students of seventh graders in academic year 2022/2023 were participated.

This research adopted quantitative design that aims to examine or verify an existing theory (Cresswell, 2018). The objectivity of this research is to investigate the effectivity of the supplementary textbook: *Dahani Dahanai* Learning English in improving students’ academic achievement.

The instrument was standardized test employed two times as pretest and posttest. The standardized test had in total 50 questions consisted of 40 multiple choice items and 10 essay questions, which were adopted from a textbook entitled “*Mandiri: Practice Your English Competence, for class VII*” that was released in 2017 by *Erlangga*.

The paired sample t-test and the N-gain score were employed. The T-test determined whether or not there was a difference in student results between the pretest and posttest. If there is significant difference, the N-gain score test would determine the textbook effectivity.

There are two hypotheses suggested for the paired sample t-test:

H0: There is no significant difference on students' score.

Ha: There is significant difference on students' score.

SPSS software calculated the outcome. If sig. value is $< \alpha$ 0.05 null hypothesis is rejected, thus alternative hypothesis is accepted. However, if the sig. value is $> \alpha$ 0.05, null hypothesis is failed to be rejected.

The gain score or N-gain (g) was calculated using formula featured by Hake (1998)

$$N\ Gain = \frac{Posttest\ score - Pretest\ score}{Ideal\ score\ (100) - Pretest\ score}$$

The interpretation of the N gain is based on the table below:

Value (g)	Classification
$(g) \geq 0.7$	High - g
$0.7 > (g) \geq 0.3$	Medium - g
$(g) < 0.3$	Low - g

RESULT AND DISCUSSION

The following is the outcome of paired sample T-test analysis on students' pretest and posttest results:

Table 2 Paired sample T-test SPSS calculation

Paired Samples Test								
Paired Differences								
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
pre - post	-2.01294	.83009	.11624	-2.24641	-1.77947	-17.318	50	.000

The significance value is 0.000 which is lower than $\alpha = 0.05$. The difference between the pretest and posttest scores is significant. The null hypothesis was therefore effectively refuted.

Next, the average of N-gain is $g = 0.310704825$. This was interpreted as medium since it fell within "medium" g range category ($0.7 > (g) \geq 0.3$). This means that the product was able to boost students' academic achievement with a medium score increase.

The English teacher was impressed by the improvement in the posttest because it was previously uncommon to see actual meaningful growth on students' test scores. The average difference in scores between the pretest and posttest was two points. Just 5 learners reached the passing grade of 6 in pretest, whereas 22 out of 51 students passed in the posttest. This means local content, multimodality, and materials that fit the student's preferences indeed have substantial positive effect on the teaching and learning activity.

However, the N-Gain calculation result, which barely achieved medium gain, indicated that the product needs more improvement. Another ASSURE procedure loop is required to maximize the development. If developed with enough funds and time, the product has great potential.

On the other hand, try out duration is also a crucial factor. The students have very low English proficiency to start with, hence they need more time to learn with the book. If only

the product was implemented in longer period of time, higher gain score could be possible.

CONCLUSION

Even though the improvement is not categorized as high, the supplementary textbook entitled “*Dahani Dahanai Learning*

English” was proven capable to significantly increase students’ academic achievement in English subject with medium gain score (0.31). Moreover, the result is also indicated that familiar contents supported by internet-based multimedia is constructive and helpful for English learning.

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