THE EFFECTIVENESS OF ANAGRAM TECHNIQUE IN BUILDING VOCABULARY MASTERY

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Abstrak

Penelitian ini laksanakan dengan tujuan untuk mengevaluasi efektivitas dari teknik anagram dalam meningkatkan penguasaan kosakata serta menilai signifikansinya pada siswa kelas delapan di SMPN 5 Sungai Kunyit. Dengan menggunakan metode kuantitatif dan desain pra-eksperimental, penelitian mengadopsi desain one group pretest-posttest. Subjek penelitian terdiri dari 32 siswa kelas VIII, dengan rincian 18 siswa laki-laki dan 14 siswa perempuan di SMPN 5 Sungai Kunyit. Data dikumpulkan melalui tes esai, dengan pre-test dan post-test dilakukan untuk setiap siswa. Analisis data menggunakan statistik deskriptif SPSS versi 16.0, termasuk uji sampel berpasangan untuk menguji hipotesis, serta ukuran efek Cohen untuk mengevaluasi pengaruh teknik anagram.Hasil penelitian menunjukkan bahwa penerapan Teknik Anagram secara efektif meningkatkan penguasaan kosakata siswa. Perbedaan yang signifikan terlihat dari rata-rata pre-test (64,63) dan post-test (88,94), menandakan dampak yang mencolok setelah intervensi. Standar deviasi pre-test (8,36) yang lebih rendah dari post-test (6,72) menunjukkan konsistensi pelaksanaan intervensi. Analisis uji t sampel berpasangan menghasilkan signifikansi (Sig.) sebesar 0,000 dengan alpha skor 0,05, menunjukkan penerimaan hipotesis alternatif (H_a) dan penolakan hipotesis nol (H_o). Efek Cohen yang besar (1,61) menegaskan kekuatan penggunaan Teknik Anagram dalam membangun penguasaan kosakata. Secara keseluruhan, hasil analisis menunjukkan bahwa Teknik Anagram efektif dalam mengajar dan meningkatkan penguasaan kosakata pada siswa kelas delapan SMPN 5 Sungai Kunyit.

Kata Kunci: *Efektivitas, Teknik Anagram, Penguasaan Kosakata*

Abstract

This study has two primary objectives: firstly, to assess the efficacy of the Anagram Technique in enhancing vocabulary mastery, and secondly, to establish its significance in vocabulary development for eighth-grade students at SMPN 5 Sungai Kunyit. applying a quantitative approach along with the pre-experimental design, specifically a one-group pretest-posttest design, the research involved 32 eighth-grade students, comprising 18 males and 14 females from SMPN 5 Sungai Kunyit. Data collection utilized essay tests for both pre-test and post-test assessments. The gathered data underwent analysis using descriptive statistics in SPSS version 16.0. The researcher implemented data distribution, performed a paired sample t-test for hypothesis testing, and included Cohen's effect size to evaluate the Anagram Technique's impact on vocabulary mastery.The research findings indicated the effectiveness of the Anagram Technique, as demonstrated by significant mean score differences before and after treatment (64.63 and 88.94, respectively). The lower standard deviation of the pre-test (8.36) compared to the post-test (6.72) suggested successful treatment implementation. This success was further supported by the paired sample t-test in SPSS 16.0, revealing a notable result (Sig. 0.000) at an alpha level of 0.05. Consequently, the rejection of the null hypothesis (H_o) and acceptance of the alternative hypothesis (H_a) occurred since the significance value (Sig) was below α. Furthermore, the calculated effect size using Cohen's method (1.61) emphasized a substantial impact of the Anagram Technique on enhancing vocabulary mastery. In summary, the analysis results collectively affirmed that the Anagram Technique was an effective pedagogical approach for cultivating vocabulary proficiency among eighth-grade students at SMPN 5 Sungai Kunyit
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Keywords: *Effectiveness, Anagram Technique, Vocabulary Mastery*

INTRODUCTION

Understanding and acquiring vocabulary is a crucial aspect of language learning. Mastery of vocabulary plays a vital role in effective communication and interaction, particularly in language use. Knowledge of a word extends beyond mere recognition of its meaning; it involves understanding and the ability to use it appropriately in various sentence contexts. In the realm of teaching English, vocabulary serves as a fundamental and foundational element, forming the basis for language learning. According to Harmer (2013: 229), it is difficult to employ abilities like speaking, writing, reading, and listening in the context of teaching a foreign language since vocabulary is required in order to use these skills. When you make use of terminology, it will be much simpler to comprehend what other people are saying or writing. People are able to more easily verbalize or write down their ideas and thoughts in the target language as a result of this. While teaching a foreign language, one of the most essential things to focus on is expanding the student's vocabulary. Skills in language and grammar might benefit by expanding one's vocabulary.

Proficiency in vocabulary holds great significance in language instruction. Students need a strong command of English vocabulary as it serves as a foundation for all English subjects. Having an extensive English vocabulary is crucial for students to comprehend the meanings of the content they encounter in their English studies. It is impossible to separate vocabulary from the other four abilities since vocabulary has its own components, and whether students listen, speak , read, or write their constantly engage their vocabulary in order to communicate their thoughts, ideas, or views. Vocabulary development is one of the most essential aspects in studying foreign language.

Based on previous related study, which is conducted by (Rosadi, 2017:41), Language learners face a challenge in comprehending spoken communication when they struggle to identify the spoken words representing ideas. This indicates that students face challenges in expressing themselves and summarizing a story from the text. In the school under investigation, this issue arises due to the insufficient vocabulary that students possess and could not be fully optimized, students will likely to have difficulties in understanding the content of the text if they only have a little vocabulary, cannot mention the vocabulary. Ideas in written form, cannot create communication clearly and cannot retell stories from text. Similar problems also occurred to students of SMPN 5 Sungai Kunyit.

Based on Pre-Observation, researcher saw that vocabulary mastery of the eighth-grade students had difficulty in vocabulary mastery. Many students perceive English as challenging, and at times, they feel uncertain about comprehending the presented material. The students struggle with grasping the meanings of newly introduced vocabulary. Students encounter challenges in comprehending and interpreting the content of the text. Due to these challenges, it is essential to implement engaging and creative learning methods that encourage students to actively participate, allowing them to acquire a broader vocabulary during lessons.

Playing word games like Anagrams is one technique of expanding one's vocabulary and understanding of their meanings. Use various technique, like as anagrams and the introduction of new terms, to pique students' interest in learning English and encourage them to push themselves to learn more. Word games like anagram require students to pay careful attention to words and call out words depending on the directions provided; they also offer students experience in calling out words based on the instructions given; and they stimulate word play. in essence (Asian EFL Journal). Collins (2014:54) Describes anagrams as a subset of word games where individuals try to form a fresh word or phrase by rearranging the letters of an existing one. The finest anagrams keep the original subject matter in mind while still being amusing. Contrary, humorous, scathing, sarcastic, or flattering, they are always interesting. Students will be more engaged in their studies because of this technique. Vocabulary instruction that employs this technique is extremely helpful in building students' vocabularies.

From the given explanation, the researcher concluded that the anagram technique was a suitable method for assisting students in learning and enhancing vocabulary. Consequently, the researcher expressed interest in conducting this pre-experimental research to improve vocabulary mastery among eighth-grade students at SMPN 5 Sungai Kunyit.

METHOD

This research implements the quantitative method with a pre-experimental design. The experimental method involves conducting research to uncover a causal relationship between two or more variables while controlling the influence of other variables, as Nawawi (2015:88) explains. The research design that being used was a *one group pretest-posttest design.* Based on the research design, a pretest is administered before the treatment is provided. This allows for a more accurate assessment by comparing the results with the prior situation and into the treatment.

The subject in this research are all eighth-graders at SMPN 5 Sungai Kunyit, where there was only one class. There are 32 students enrolled in the eighth grade at SMPN 5 Sungai Kunyit, with 18 male students and 14 female students making up the class's total enrollment.

In this research, the researcher used measurement techniques as data collection. "Measurement is a method that is measuring, since it employs standard equipment and provides data from measurement findings in the form of ordinal numbers (numbers)," as stated by Sukmadinata (2010:230). The researcher used applied a vocabulary test for pre-test and post-test as tools of data collection. Margono (2014:158) argues that "a test is a set of stimuli given to someone with the intention of getting an answer that can be use as the basis for determining a numerical score". This type of test uses essays, and oral test that used to measure students' word meaning, word use, spelling, and pronunciation for pre-test and post-test used same level.

The researcher ensured the validity of the instrument by having test items reviewed by a validator to assess the content validity of the test. The validity test was conducted before utilizing the instrument for data collection. Reliability is the index to point out so far, the instrument to collect the data reliable or not. Based on Cohen *et al.* (2007:146), "a reliable instrument for a piece of research yielded similar data from similar respondents over time". Reliability was done by the researcher by considering a good passage for students.

Data analysis holds a crucial role in the research process as it enables the utilization of data to address research problems and achieve research goals. Various data analysis techniques employed, and the formulas specific to each technique utilized by the researcher to analyzed the data effectively using mean score, individual score, standard deviation, normality test, testing hypothesis, and effect size.

RESEARCH FINDINGS AND DISCUSSION

The subsequent analyses aim to present the individual scores, mean scores, and standard deviation of the test. Additionally, it includes a normality test, a hypothesis analysis to ascertain the hypotheses, and an effect size calculation to address the research question.

The data were gathered from the eighth-grade class, which served as the subject. The pre-test was administered by the researcher before introducing the Anagram Technique to enhance vocabulary mastery. The pre-test took place during the initial session and aimed to assess the students' English vocabulary prior to any treatment, focusing on the topic of descriptive text. During

the pre-test session, the researcher instructed the students to complete a vocabulary test. The mean score, calculated by dividing the total score by the number of subjects, indicated an average score of 64.63 for the pre-test. Subsequently, the researcher conducted the post-test after implementing the Anagram Technique as a vocabulary teaching method. The post-test, which occurred during the final meeting, aimed to evaluate the students' vocabulary following the treatment, utilizing a vocabulary test centered on descriptive text. The scoring of the students' vocabulary was adapted from Microsoft Excel. Mean score of post-tests used as the hint either Anagram has significant effect or not so the students 'mean score 88,94 with the category excellent.

The standard deviation of students indicates how much the scores in the pre-test and post-test vary from the average score of the students. The researcher measured the pre-test and post-test scores for all thirty-two eighth-grade students, ranging from zero to one hundred (0-100). The data is presented in Table 1 below:

Table 1 Students' Pretest and Post-Test Score
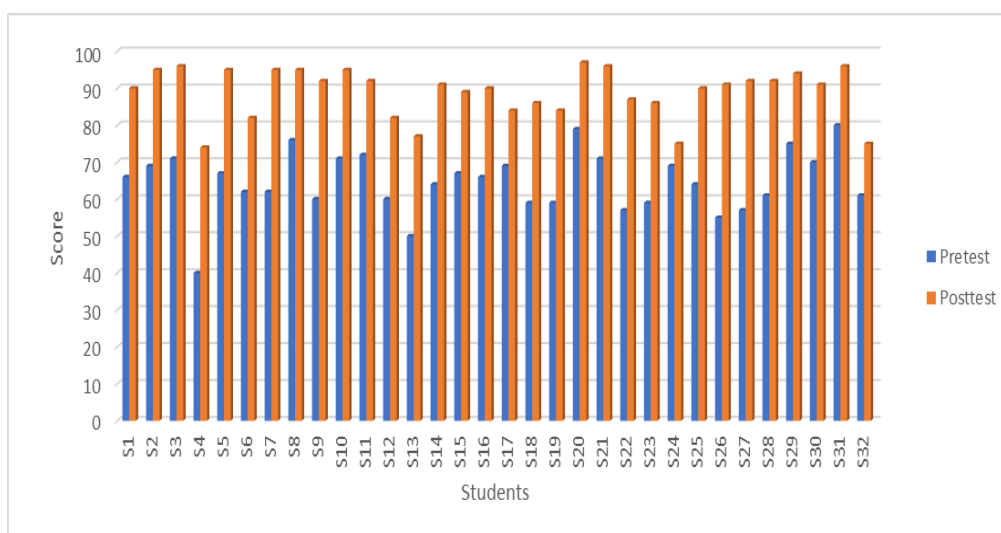
According to Table 1, it can be inferred that the minimum score obtained in the pre-test was 40 (Student 1), and the maximum score was 80 (Student 31). Similarly, in the post-test, the lowest score recorded was 74 (Student 4), while the highest score reached 97 (Student 20). These results indicate that the implementation of the Anagram Technique had an impact on the students' test scores, as evidenced by the discernible differences between the pre-test and post-test data.

To calculate the standard deviation of students in both the pre-test and post-test, SPSS 16.0 was employed. The standard deviation of students in the pre-test and post-test is explained as follows:

Table 2 Students' Standar Deviation in Pre-test and Post-test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Pretest	32	64.6250	8.35792	1.47749
Posttest	32	88.9375	6.71511	1.18708

Based on table 2, students' standar deviation on pret-est was 8,36 and the students' standar deviation on post-test was 6,72.

The normality test is important in a statistic calculation. The normality test is used to find out if the data is normally distributed or not. It is important for the researcher to know the distribution of the data so that the researcher able to decide the next step of the test, whether to use t-test or u-test. The researcher opted to perform a Kolmogorov-Smirnov test to assess the data distribution. The Kolmogorov-Smirnov test was used to assess the distribution of the data by comparing the p-value (p) with the alpha-value (α). A p-value below 0.05 (α) suggests non-normal distribution, while a p-value equal to or above 0.05 (α) indicates a normal distribution. The outcomes are outlined in Table 3.

Table 3 Normally Test

One-Sample Kolmogorov-Smirnov Test

		Pretest	Posttest
N		32	32
Normal Parameters[a]	Mean	64.6250	88.9375
	Std. Deviation	8.35792	6.71511
Most Extreme Differences	Absolute	.094	.188
	Positive	.067	.115
	Negative	-.094	-.188
Kolmogorov-Smirnov Z		.533	1.063
Asymp. Sig. (2-tailed)		.939	.209
Test distribution is Normal.			

Based on table 3, the value of p ≥ 0,05 (α) for pre-test was 0.939 > 0,05 and for post-test was 0,209 > 0,05, the conclusion that can be drawn is that the data pre-test and post-test is normally distributed.

The hypothesis or the probably of this research has been by Urdan (2004:90). The result has been measured and displayed as table 4:

Table 4 T-Test Value

Paired Samples Test									
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	pretest - posttest	-2.43125 E1	6.62078	1.17040	-26.69954	-21.92546	-20.773	31	.000

To answer the first question, the researcher used Sig. (2-tailed) was 0,000 as the comparison of the alpha-value (α) was 0,05. Based on table 4 the Sig. (2-tailed) < α (0,000 < 0,05), it means that there was a difference in students' vocabulary before and after using Anagram technique and it was significant. Based on the compare the Sig. (0,000) < α (0,05), means that the Alternative Hypothesis (H$_a$) is acceptable and the Null Hypothesis (H$_o$) are going to be rejected. Here, the researcher took the conclusion that Anagram as a teaching technique is effective to use in building students' vocabulary mastery at eighth grade students of SMPN 5 Sungai Kunyit in the Academic Year of 2022/2023.

In this study, the effect size score was 1.61, falling into the "Strong Effect" category. A strong effect is classified when the effect size (ES) is greater than 1. In light of the earlier explanation, the response to the second research question regarding the efficacy of employing the anagram technique to enhance vocabulary mastery among eighth-grade students at SMPN 5 Sungai Kunyit is determined to be a strong effect.

After conducting the data analysis process, researcher proceeded to discuss the research findings in accordance with the collected data. To answer the initial research query and ascertain which hypotheses were accepted or rejected, the researcher conducted an examination of the

statistically significant variances between the pretest and posttest. Utilizing a paired samples t-test for this assessment was deemed appropriate due to the normal distribution of the data. Following the data analysis, the researcher observed a comparison between the Sig. (2-tailed) value and the alpha-value (α).

In conclusion, the anagram technique proves effective in enhancing vocabulary mastery, as evidenced by the positive outcomes observed in this pre-experimental research. The technique aids students in retrieving specific information, comprehending the vocabulary meanings within a text, expressing ideas in written form, and fostering clear communication. Anagram technique is facilitating them to formulate the process of understanding vocabulary maximally. Susanti & Argawati (2022) Indicate that students are driven by the motivation to guess the correct answer to an anagram word. However, a factor to consider when employing this technique is that the classroom can become difficult to manage due to heightened learning activity. The study noted some students causing disturbances in the class. Nevertheless, the overall outcome is notably positive and effective. Consequently, in this study, the use of the Anagram technique for learning vocabulary proves highly effective in cultivating students' eagerness to learn vocabulary. As proposed by Nurwulandari & Asnawi (2022), The students could be motivated and enthusiastic in the learning process. They found it easier to memorize the words given by the researcher. Teaching vocabulary using the Anagram Technique had a greater impact than teaching vocabulary without using the Anagram Technique, indicating that the Anagram Technique influences students' understanding of vocabulary skills.

Additionally, in addressing the second research inquiry, the researcher assessed the efficacy of the treatments by measuring the effect size, revealing a pronounced impact from the Anagram technique. This finding aligns with prior research conducted by Rosadi (2017) and Madina & Tamba (2023), which underscored the anagram as an effective strategy for vocabulary acquisition and emphasized its role in fostering greater learner autonomy. The use of anagrams encourages students to undertake more challenging tasks, such as identifying words from provided alphabets, seeking guidance from instructors and references, and actively engaging in discussions with peers. Beyond its contribution to vocabulary mastery, this technique introduces an element of enjoyable and interactive learning. Consequently, educators are strongly advised to integrate the Anagram Technique into their teaching methods to enhance students' vocabulary acquisition.

Furthermore, the Anagram Technique is instrumental in honing various skills, including language proficiency, logical reasoning, cognitive abilities, memory, and creativity.

CONCLUSION

From the research that has been conducted, the researcher can assert that the Anagram technique proved effective in enhancing vocabulary mastery among eighth-grade students. The students showed their interest in activities which employing the Anagram technique for vocabulary learning. This method demonstrated efficacy in elevating students' vocabulary proficiency at SMPN 5 Sungai Kunyit during the Academic Year 2022/2023. To address the first research question, the researcher substantiated their findings through a comparison of students' scores before and after instruction using the Anagram technique. The pretest mean score was 64.63, while the post-test mean score significantly increased to 88.94. This statistical difference was further validated through Paired Sample T-Test analysis in SPSS 16.0, yielding a significant Sig. (2-tailed) value of 0.000, where the alpha-value (α) was set at 0.05. Consequently, as the Sig. (2-tailed) was less than α (0.000 < 0.05), the alternative hypothesis (H_a) was accepted, and the null hypothesis (H_o) was rejected. In response to the second research question, the researcher affirmed the impact of the Anagram technique on students' vocabulary mastery through the calculated effect size, which was determined to be 1.61, categorizing it as a strong effect. Hence, this technique is recommended for building students' vocabulary proficiency among eighth-grade students at SMPN 5 Sungai Kunyit in the Academic Year 2022/2023.

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