THE EFFECTIVENESS OF USING THE POGO ANAGRAM GAME TO INCREASE VOCABULARY MASTERY OF TENTH GRADE STUDENTS AT SMK NU PACE

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Abstract— This study aims to analyze the effectiveness of using Pogo Anagram Game in improving vocabulary mastery of grade X students at SMK NU Pace in the 2023/2024 academic year. The method used in this study was an experiment with a pre-test and post-test design, involving 29 students from the X TKJ-2 class. Data was collected through pre-test and post-test to measure students' vocabulary mastery before and after the application. The results showed that the average score of students' pre-test was 60, which indicated unsatisfactory vocabulary mastery. After the implementation of the Pogo Anagram Game, the average post-test score increased to 80, indicating a significant improvement in students' vocabulary acquisition. Statistical analysis using t-test resulted in a t-count value >= 1.699 (at 5% significance level and degree of freedom = 28), which confirms that there is a significant difference between pre- and post-learning vocabulary acquisition. The conclusion of this study is that Pogo Anagram Game is effective in improving students' vocabulary acquisition. The findings make an important contribution to the development of innovative and engaging learning methods, and demonstrate the potential of using educational games in the context of English language learning. This research is expected to be a reference for educators in implementing more interactive and fun learning methods to improve students' learning outcomes.

Keywords : Vobaulary mastery, pogo anagram, word game

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INTRODUCTION

Vocabulary mastery is one of the important aspects of English learning, which plays a significant role in students' communication skills. Diane Lauer, a Language Educator, aptly captures the essence of vocabulary's role in language: "Vocabulary is the foundation of language. It is the building block that allows us to express our thoughts, ideas, and emotions" (Lauer, 2016:1) This statement highlights the crucial importance of vocabulary in our ability to communicate effectively. A strong vocabulary empowers us to articulate our thoughts with precision and clarity, enabling us to engage in meaningful conversations, grasp complex concepts, and delve into the intricacies of different fields of knowledge. A rich vocabulary allows students to express their ideas and opinions more effectively, both orally and in writing. However, many students have difficulty in remembering and using new vocabulary, which can hinder their learning process. (Widdowson, 2001: 16) By mastering English, individuals can build a network of friends and cooperation with people from various countries, contribute to the progress of the nation, and open up opportunities to achieve their dreams on the global stage. which indicates that good vocabulary mastery is very influential on overall language ability. Therefore, innovative and interesting learning methods are needed to improve students' vocabulary mastery.

Based on previous research, it was found that students often feel bored and lack motivation in learning vocabulary, especially when the methods used are monotonous and not interactive. According to (Hodgkinson, 2014:15) emphasizes, "Learning is not a spectator sport. Students won't learn much just by sitting and listening to teacher. They have to think about what the teacher is saying; they have to ask questions; they have to argue with the teacher; they have to apply what they learn.

Various learning methods have been applied to improve students' vocabulary acquisition, ranging from traditional techniques to more innovative approaches. One approach that is gaining popularity is the use of educational games. Educational games not only make the learning process more fun, but can also increase student motivation and engagement. Research shows that learning that involves game elements can increase students' interest and help them remember information better. According to Douglas Gentil (2013:112) a media psychologist, suggests, "Play is a context in which children become active meaning makers. They do not just passively receive information; they process it, decipher it, and use it in new ways." Pogo Anagrams reflect this principle, transforming vocabulary acquisition from a passive activity into an interactive and playful exploration.

Pogo Anagrams are deceptively simple word puzzle games where letters change, offering a surprising depth of challenge and educational value. At their core, they involve rearranging the letters of a single word or phrase to create entirely new words. This seemingly straightforward manipulation opens up a world of linguistic exploration, cognitive stimulation, and even creative expression.

The beauty of anagrams lies in their accessibility. Unlike complex vocabularies or specialized knowledge, they require no special background. Anyone who understands the alphabet can dive into the world of anagrams. Players must analyze letter combinations, identify potential patterns, and experiment with different arrangements. This process strengthens phonemic awareness, an important ability to identify and manipulate sounds in words. As educational psychologists Peggy Goswami and Brenda Bryant (2011:104) highlight, "Strong phonemic awareness is a foundational skill for reading and spelling proficiency."

Based on the previous explanation, and as an effort to improve students' vocabulary acquisition, Pogo Anagram has the potential to be a useful medium; therefore, it is expected to create a more dynamic and fun learning environment, which in turn can improve students' learning outcomes and prepare them to communicate effectively in English in various contexts. The application of Pogo Anagram Game as a learning method is expected to not only improve students' vocabulary acquisition, but also build collaborative and critical thinking skills that are essential in the learning process. Thus, this study contributes to the development of more effective and enjoyable education, as well as providing a basis for further research in the field of language learning. Based on the previous explanation, the writer is conducting a study entitled "The Effectiveness Of Using The Pogo Anagram Game To Increase Vocabulary Mastery Of Tenth Grade Students At Smk Nu Pace In The Academic Year 2023/2024"

This research is aimed to (1) to explore students' vocabulary mastery before being taught by using Pogo Anagaram Game in class X of SMK NU Pace academic yaer of 2023-2024. (2) to explore students vocabulary mastery before and after using Pogo Anagram Game in class X of SMK NU Pace academic year of 2023-2024. (3) To analyze the significant difference in students vocabulary masterbefore and after being taught by using Pogo Anagram Gme in class X SMK NU Pace academic yaer of 2023-2024.

RESEARCH METHODOLOGY

This research uses an experimental design with a pre-test and post-test approach. This design was chosen to measure the effectiveness of using the Pogo Anagram Game in improving students' vocabulary mastery. By comparing the results of the pre-test and post-test, researchers can assess the changes that occur in students' vocabulary mastery after implementing the new learning method. Data obtained from the pre-test and post-test are analyzed using descriptive statistics to calculate the average score. Next, inferential analysis was carried out using the t-test to determine whether there was a significant difference between the pre-test and post-test scores.

The data analyzed in this research are data obtained from the results of the Pre-test and Post-test values using the following formula, Data processing results used in this study using two techniques, namely descriptive statistics and inferential statistics:

Descriptive Statistic

Descriptive statistics is used to analyses data or describing the data as it is without making conclusions that can general conclusions (Sugiyono, 2018a: 206). This analysis uses visual illustrations to assess students' reading comprehension skills is mean to determine the students' average score.

$$M = \frac{\sum X}{N}$$

Standard deviation if the standard deviation of a data set is zero, all values in the set are equal, but if the standard deviation is larger, individual data points are far from the mean value (Mikhail (Hidayat et al., 2019: 50-51)).

$$SDx = \sqrt{\frac{\sum X^2}{N_n}}$$

Inferiantial Statistic

Inferential statistics is a statistical method used to examine sample data and produce conclusions that apply to the population (Sugiyono, 2018a: 207).The data was analyzed with the t-test formulation as follows:

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N \cdot N}}}$$

N-Gain used method to measure the effectiveness of a learning or intervention in improve learners' learning outcomes (Sukarelawan et al., 2024 : 9)

$$N^{\text{Gain Score}} = \frac{\text{Posttest score} - \text{pretest score}}{\text{Ideal Score} - \text{pretest score}} \times 100\%$$

RESEARCH FINDINGS AND DISCUSSION

The research findings reveal a compelling enhancement in vocabulary mastery among tenth-grade students at SMK NU Pace after the introduction of the Pogo Anagram Game as a learning tool. Initially, the students' performance was assessed through a pre-test, which yielded an average score of 60. This score indicated that the students possessed a basic understanding of vocabulary but lacked the proficiency necessary for effective communication and comprehension, as it fell below the expected benchmark of 75. Following the implementation of the Pogo Anagram Game, a post-test

was conducted to evaluate the impact of this interactive learning method. The results were striking, with the average post-test score rising to 80. This increase of 20 points signifies a substantial improvement in vocabulary acquisition, suggesting that the game not only engaged the students but also effectively facilitated their learning process.

Table 1. pre-test and post-test result

Test	Average	Category
Pre-test	60	Low
Post-test	80	Good

To further substantiate these findings, a statistical analysis was performed using a t-test, which is a common method for comparing the means of two groups. The analysis revealed a t-value greater than the critical value of 1.699 at a 5% significance level, indicating that the difference between the pre-test and post-test scores was statistically significant. The calculation results of the t-test are as follows:

Table 2. Hypothesis Test Result

t_{count}	Dk	t_{tabel}	Conclusion
22,7	28	1.699	$t_{count} > t_{table}$, H0 is rejected and Ha is accepted

From the data obtained when calculating between pre-test and post-test using pogo anagram games in class X TKJ 2 on vocabulary mastery with t-test, the results obtained are t_count=22,7 > t_table = 1,699 (for 5% significant level and degree of freedom = 28) so that H0 is rejected and Ha is accepted. Thus, the results of this study indicate that "there is a significant difference for students' vocabulary mastery before and after using pogo anagaram games for students' vocabulary mastery in grade 10 of SMK NU Pace in the 2023/2024 school year".

Based on the results of the calcul Table 3. N-gain Result

N Gain Score	N Gain Percantage
0.60	60%

From the N-gain score test above, it shows that the average n-gain score of students in class X- TKJ 2 in improving vocabulary mastery using the pogo anagram game is 0.60 or 60% which is included in the moderately effective category. At the pre-test stage, most of the students had vocabulary mastery skills that could be categorized as quite low with an average score of 59. They had difficulty in understanding the meaning of a vocabulary, interpreting vocabulary and composing new vocabulary. Students made many mistakes especially in identifying a new vocabulary that was quite unfamiliar to them. After the treatment using pogo anagram game as a learning aid, the students' average score increased to 84. Students showed better understanding in some aspects of vocabulary acquisition, with fewer errors in understanding the meaning of a vocabulary word. This study shows that the use of pogo anagram game has effectiveness in improving students' vocabulary mastery. pogo anagram game proved to be an effective method to improve students' vocabulary mastery.

The findings underscore the effectiveness of game-based learning in educational settings, particularly in language acquisition. The Pogo Anagram Game not only made learning more enjoyable and engaging for the students but also fostered a collaborative learning environment where students could work together, share knowledge, and support each other's learning. This interactive approach likely contributed to deeper cognitive engagement, allowing students to think critically about word formation and meanings.

Overall, the research findings highlight the potential of innovative teaching strategies, such as the Pogo Anagram Game, to enhance vocabulary mastery and improve educational outcomes. The significant increase in students' vocabulary skills suggests that incorporating interactive and game-based methods into language education can lead to more effective learning experiences, ultimately benefiting students' communication abilities and overall academic performance.

CONCLUSION AND RECOMMENDATIONS

In conclusion, this study provides compelling evidence that the Pogo Anagram Game significantly enhances vocabulary mastery among tenth-grade students at SMK NU Pace. The research findings revealed a marked improvement in students' average scores, which increased from 60 in the pre-test to 80 in the post-test, indicating a substantial gain in vocabulary skills. This improvement was further validated by statistical analysis, which confirmed that the differences in scores were statistically significant. The results suggest that the Pogo Anagram Game not only captures students' interest but also effectively facilitates their understanding and retention of new vocabulary through interactive and engaging learning experiences.

Given the positive impact of the Pogo Anagram Game, it is recommended that educators consider incorporating similar game-based learning strategies into their curricula. Such methods can transform traditional vocabulary instruction into a more dynamic and enjoyable process, fostering greater student engagement and motivation. Educators should also focus on creating a collaborative classroom environment where students can work together, share insights, and support each other's learning, as this peer interaction can further enhance vocabulary acquisition.

Moreover, it is advisable for future research to explore the long-term effects of game-based learning on vocabulary retention and overall language proficiency. Studies could investigate the effectiveness of various types of educational games across different subjects and age groups to determine best practices for implementation. Additionally, research could examine how these games can be adapted to meet diverse learning needs and styles, ensuring inclusivity in the classroom.

In summary, the findings of this study underscore the potential of innovative teaching strategies, such as the Pogo Anagram Game, to improve vocabulary mastery and enrich the language learning experience. By embracing and implementing such interactive methods, educators can not only enhance students' academic performance but also cultivate a lifelong interest in language learning, ultimately preparing them for future academic and professional success.

BIBLIOGRAPHIES

Beech, S. (2017). International student mobility: A critical overview. *Laboring and learning*, *10*, 285.

Butler, A. C., Black-Maier, A. C., Raley, N. D., & Marsh, E. J. (2017). Retrieving and applying knowledge to different examples promotes transfer of learning. Journal of Experimental Psychology: Applied, 23(4), 433.

Ghalia, N. H., & Karra, S. Y. (2023). Teacher Readiness and Learner Competency in Using Modern Technological Learning Spaces. *Sustainability*, *15*(6), 4928.

Indrawati, I., & Resti, F. (2020). Using Anagram Technique to Develop Students' Vocabulary Mastery to the Seventh Grade Students. *Sustainable Jurnal Kajian Mutu Pendidikan*, *3*(2), 86-96.

Kartikasari, D., & Putra, A. S. (2021). The Effect Of Anagram Game On The Eighth Grade Students'vocabulary Mastery at SMPN 3 Balaraja. *Globish: An English-Indonesian Journal for English, Education, and Culture*, *10*(1), 1-7.

Khotimah, K., & Zumaro, V. I. (2023). The Effectiveness Of Online Anagram Game On Students'vocabulary Mastery. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, *6*(2), 421-432.

Le, L. P. (2017). *Aligning specialist English language curriculum in higher education with development imperatives and workplace communication needs in Vietnam: A case study of the Vietnamese petroleum industry* (Doctoral dissertation, Queensland University of Technology).

Lee, J. P. (2014). Alice's Adventure Through Second Language Acquisition: An Educator's Perspective.

Mertzani, M. (2022). Sign language literacy in the sign language curriculum. *Momento-Diálogos em Educação*, *31*(02), 449-474.

Othman, I. W., Ahmad, M. K. L., & Esa, M. S. (2022). Empowering the sustainability of the Malay language as a communication transmission and element of identity. *Management*, *7*(29), 216-237.

Palacios Vivar, C. (2022). *Effects of exposure to l1 translation in vocabulary acquisition in english as a foreign language with college students* (Doctoral dissertation, Universitat Politècnica de València).

Rosadi, A. (2017). The Effectiveness of Anagram Technique in Teaching Vocabulary. *Voices of English Language Education Society*, *1*(1).

Sinaga, H., Herman, H., & Pasaribu, E. (2020). The effect of anagram game on students' vocabulary achievement at grade eight of SMP Negeri 8 Pematangsiantar. *Journal of English Educational Study (JEES)*, *3*(1), 51-60.

Tugberk, C., & Sirin, S. (2024). Beyond Intelligence: The Life and Work of Howard Gardner. In *The Palgrave Handbook of Educational Thinkers* (pp. 1-17). Cham: Springer International Publishing.

Zein, S. (2020). *Language policy in superdiverse Indonesia*. Routledge.