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# A pre-experimental study: Spelling bee game to elevate vocabulary mastery of Gen Z students

Putri Bulan Mawar a \*, Afrillia Anggreni b

Universitas Tadulako. Jl. Soekarno Hatta No.KM. 9, Kota Palu, 94148 Indonesia 

a putribulanm@gmail.com; b afrillthe1st@gmail.com

\* Corresponding Author.

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Abstract: Vocabulary is the most crucial component for EFL learners in learning English because it is a key to acquiring and improving language skills. Nevertheless, to master vocabulary, the EFL learners need great effort. Therefore, this study aims to identify the effectiveness of spelling bee games in boosting vocabulary mastery of Gen Z students. This study employed a pre-experimental design with one group pre-test and post-test. The sample consisted of 32 students from class VII G, a show was selected purposively. The data collection involved pre-test and post-test. The data were analyzed using a parametric test (paired-sample test) assisted by SPSS 26. The result of this study finds that the significance of 2-tailed is lower than (<) 0.05, which reveals that spelling bee as a conventional game is still statistically effective in elevating Gen Z' English vocabulary. Thus, conventional games can still be maintained to teach Gen Z students vocabulary, especially in teaching form (spelling) and use (constructing sentences).

Keywords: Meaning, making sentence, spelling bee, vocabulary mastery

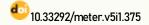
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#### INTRODUCTION

In learning English, students must have numerous vocabularies as the most crucial aspect to improve four language skills. EFL students cannot comprehend and express their ideas or thoughts if they have less vocabulary (Pratiwi et al., 2021). With a large stock of words, the students can show their good performance in all aspects of English-language work (Swi King, 2020). Thus, as a fundamental aspect, the students should have plenty of words to engage their English performances

In teaching vocabulary, especially to young learners, EFL teachers have adopted, adapted or even created various methods or strategies to make students easy to master English vocabulary. One of the methods is by implementing game either digital or conventional. It aims to motivate students and to create an interesting environment in learning since English is viewed as difficult lesson. With a fun learning process, games can provide meaningful learning (Nurchintyawati, 2022). Language game activities make the students more focused on the lesson (Owen et al., 2019). Teaching vocabulary to young learners is more effective through games than using English books or worksheets (Adisti, 2016). Therefore, games are able to attract students' attention, and they provide positive impacts on students' active participation and performance

Currently, digital games are viewed as the most popular and effective methods for teaching students especially gen Z who grow in the digital age. They are also considered as innovative ways of adapting the development of technology. Mobile technology and interactive visual learning materials are applicable for Gen Z (Choo & Taha, 2023). Teaching gen Z must adapt with the use of technology and internet (Turner, 2015). Gen Z should be taught by using technology to develop additional skills and competencies (Hernandez-de-Menendez et al., 2020). Digital games authorize and engage motivational skills of learners and supply a relax



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atmosphere (Flores, 2015). Students' learning and cognitive processes are significantly improved through the utilization of computer-assisted instruction (CAI) and multimedia (Aghlara & Tamjid, 2011). Nevertheless, numerous teachers and previous researchers are still interested in implementing conventional games in teaching vocabulary to gen Z because of some reasons such as students' characteristics, unsupportive facilities, unstable internet connections, the inability to operate technology and also to create relationships and closeness between teachers and students.

Conventional games refer to traditional games that involve the nature of direct communication, movement and do not involve electronic use and digital applications. They only use paper, pencil, board, and physical objects. Traditional games use simple media or tools, involves motoric activity and do not use technology in its operation (Novinda & Haryadi, 2020). Traditional games can be in term of wordplay games, physical activities games and the combination of word and physical games that provoke collaboration, promote motoric activity and improve language skills (Suwastini et al., 2023)

One of conventional games that is still maintained is the spelling bee game. It is one of the games that does not only enrich students' vocabulary but also support the students to spell the word correctly. Spelling bee game creates interesting, enjoyable and challenging learning in which the students are not only easy to memorize the words, but also spell and pronounce the words correctly (Rahmawati & Harahap, 2023). Through spelling bee game, the students can spell, repeat, understand and remember the meaning of the words all at the same time (Yusuf & Mustafa, 2017). Referring to these statements, the researchers are also interested in conducting research about the implementation of spelling bee game to investigate the effectiveness of this method in teaching vocabulary to Gen Z since students have difficulties pronouncing English Letter, spelling and pronouncing words and also making them into a sentence.

A lot of researchers have investigated about the implementation of spelling bee game in teaching vocabulary mastery; however, they only focus on spelling and use. In this study, the researchers are tried to explore meaning element. In addition, the novelty of this study is to provide empirical evidence related to the use of conventional game in teaching gen Z. The finding of this result is expected to give contribution to English teachers and students about the effectiveness of traditional-based games is amid the widespread of digital-based game applications in teaching vocabulary to gen Z.

#### **METODE**

This study employed pre-experimental design with one group pre-test and post-test. it was designed to know the students' vocabulary before and after implementing spelling bee game. The treatments were conducted for six meetings with different topics. The sample was 32 students of class VII G of SMP Negeri 3 Palu, Central Sulawesi. It was selected purposively because almost students in this class were stilln having hard to pronounce alphabet and having most limited vocabulary. Furthermore, they were categorized as gen Z because they were born from the mid-1990s to the early 2010s and grow up with internet, social media, smartphones or highly technological users. Next, the data were collected by using tests. The pattern of the tests were spelling words (20 items), multiple choice (10 items) and matching words (10 items). The tests covered the students' ability in spelling, using and understanding the meaning of words.

After collecting the test result, next the data were statistically analyzed by using parametric test (Paired- sample t-test) since the sample was less than 100 students and the data was normally distributed. In addition, it was applied to measure and prove the effectiveness of a treatment or spelling bee in improving students' vocabulary mastery. The reserchers used Software SPSS 26 to analyze it to find out the mean score, standard deviation and t-test. The hypotesis of this research was if t-test is higher than (<) 0.05 (significance of 2-tailed), it means Ho is rejected, or Spelling bee game is not effective to improve vocabulary

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mastery of gen Z students. In turn, if t-test is lower than (<) 0.05 (significance of 2-tailed), it means Ha is accepted, or spelling bee game is effective to improve vocabulary mastery of gen Z students.

#### **RESULT AND DISCUSSION**

#### Result

After distributing, collecting and analysing the data of students' pre-test and post-test, the results can be seen in Table 1.

Table 1. Paired Samples Statistics

Paired Samples Statistics									
		Mean	N	Std. Deviation	Std. Error Mean				
Pair 1	Pre-test	45.3125	32	11.96349	2.11487				
	post-test	85.2813	32	8.47095	1.49747				

Based on the data in Table 1, it can be seen that implementing spelling bee game affects students' vocabulary mastery since the mean score of students in the post-test is higher than in the pre-test. Next to identify the correlation of the sample, the analysing of data revealed in Table 2.

Table 2. Paired Samples Correlations

Paired Samples Correlations						
		N	Correlation	Sig.		
Pair 1	Pre-test & post-test	32	.430	.014		

The result in Table 2 portrays that pre-test and post-test has correlation since the significance value (0.014) is lower than 0.05. Next, to prove the hypothesis, the result is presented in Table 3.

Table 3. Paired Samples Test

Paired Samples Test									
	Paired Differences				t	df	Sig. (2-tailed)		
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper	•			
Pair 1 Pre-test - post-test	-39.96875	11.29797	1.99722	-44.04210	-35.89540	-20.012	31	.000	

The data in Table 3 demonstrate that the difference between the average vocabulary mastery of the students in the pre-test and post-test is greatly significant (39.96). Furthermore, t-counted (-20.012) is described negative which means that the average of the students' vocabulary mastery before getting treatment is lower than after implementing spelling bee game. It can be interpreted that the implementation of Spelling bee statistically improves vocabulary mastery of gen Z students since that the significance value (2-tailed) <0.05. Thus, it can be claimed that spelling bee as conventional game is still effective to be carried out in teaching vocabulary mastery.

## **Discussion**

This research investigated the effectiveness of Spelling bee Game in improving vocabulary mastery of gen Z students. Initially the students struggled with spelling word because they did not know the pronunciation of English Letter, remembering and being lacked confidence to use the words in sentence. There were two factors indicated namely: the students' lack of vocabulary although they lived in digital area but they do not deeply exploit it and also English is viewed as new difficult subject in junior level. Therefore, the researchers try to find out a solution by applying a spelling game as one of conventional game that is still maintained by some teachers and researchers.

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After implementing this method, it seems success to affect students' vocabulary mastery. The result reports that students point out the ability to spell words correctly and use vocabulary into sentences. During the treatment, they always compete to spell the things around them in English. The engaging and interactive nature of the Spelling bee game motivates students to actively participate and learn new vocabulary. As a vocabulary game, spelling bee does not only enrich vocabulary mastery but also enhance students' spelling skill and comprehension toward the text (Rohmawati, 2015). Students are more active and effortless to remember the words because spelling bee game create enjoyable for the students(Karina Wedhanti et al., 2021). Furthermore, does not only improve language component and skill, spelling bee also contributes positive affective reaction in term of self-confidence and motivation. This is in line with the previous studies that with creative strategy, spelling bee can supply challenges and competition among of the students and it make student to be motivated in learning (Payra & Cardona, 2016). The implementation of the spelling bee game makes students more focus, active, and motivated in learning English (Pusparini & Ningrum, 2020). Thus, by showing the advantages of the finding this current and previous research, it can be implied that Spelling bee game in term of conventional is also still effective to teach vocabulary to gen Z.

On the other hand, the teachers should design a strategy to enhance the ability of the students in comprehending the meaning of the words since spelling bee as a traditional method does not point out significant improvement in mastering vocabulary meaning. This research seems contrast with the previous research conducted by Yusuf and Mustafa (2017) who claim that spelling bee game can simultaneously improve students' spelling, understanding and remembering the meaning of the words. It indicates that digital games are better to enrich students in comprehending the meaning of the words. Digital game is more effective for students to obtain the receptive form-meaning knowledge of vocabulary items (Rasti-Behbahani & Shahbazi, 2022).

#### **CONCLUSSION**

The main goal of this study is to prove if spelling bee game is effective to enrich vocabulary mastery of gen Z students. This study employed a pre-experimental design with one group pre-test and post-test. The result of this study demonstrates that significance of 2-tailed is lower than (<) 0.05, it conveys that spelling bee as a conventional game still provides effective contribution to elevate gen Z' English vocabulary. Thus, conventional game can be implemented by teachers in teaching vocabulary to gen Z students especially in teaching form (spelling) and use (constructing sentence). However, for the next researchers who will conduct research about spelling bee game and vocabulary mastery, it is better for them to compare digital and traditional patterns of spelling bee game to identify to what extent of this game can improve vocabulary mastery of the students. Furthermore, they can find out a strategy in improving the students' mastery in term of meaning since this research finds that spelling bee game has not been statistically effective to improving it.

#### Contribution to the Field

This study provides a significant scientific impact in the field of English language teaching, particularly in the development of game-based learning approaches. The findings, which demonstrate the effectiveness of the traditional *spelling bee* game in enhancing the vocabulary mastery of Gen Z students, strengthen the empirical foundation for implementing innovative teaching methods that align with the characteristics of today's learners. Theoretically, this research expands the understanding of the relationship between learning media, digital generation preferences, and learning outcomes, while also serving as a reference for future studies comparing conventional and digital approaches. Moreover, it encourages the development of more comprehensive vocabulary teaching strategies that address three essential aspects—form (spelling), use (constructing sentences), and

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meaning—thereby enriching scholarly discussions in applied linguistics and language pedagogy.

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**Conflict of Interest Statement**: The Author(s) declares that the research was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

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