



THE EFFECTIVENESS OF WORD BUILDING GAMES IN IMPROVING SPELLING ACCURACY AMONG GRADE 7 STUDENTS

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ABSTRACT

The purpose of this descriptive quantitative study was to address the spelling proficiency among high school students. The study participants were 39 seventh-grade students from Baltazar Nicor Valenzuela National High School. The study introduced an intervention called Digital Application Intervention to improve student spelling proficiency. The pre-test and post-test results showed a significant difference: the pre-test had a mean score of 24.49 (SD = 8.47), while the post-test showed a mean score of 43.56 (SD = 4.25). The statistical analysis revealed a significant improvement in spelling proficiency following the intervention, $t(39) = 19.1, p < .001$. Findings suggest that the intervention effectively improved students' mastery levels. To provide a comprehensive understanding of the students' insights during and after the intervention, the researchers conducted interviews with selected individuals. From the responses gathered, five themes emerged regarding the insights of students: (1) deriving enjoyment and learning from spelling activities; (2) suggestions to make spelling activities more fun (3) consistent practice as a key to improvement; and (4) using various instructional materials and strategies as essential; and (5) being open for corrections and assistance from others. The positive impact of the Word Building Games was evident in improved recognition of word patterns, increased self-confidence, enhanced retention of word spellings, and a reduction in spelling mistakes. Both teachers and learners affirmed the strategy's ease of integration and its efficacy in providing immediate feedback. These findings underscore the value of research-based strategies like Word Building Games in fostering literacy development.

KEYWORDS: Word Building Games, Barnell-Loft Diagnostic Achievement Test, quantitative-descriptive, spelling proficiency, Philippines.

INTRODUCTION

Spelling is vital to literacy, but many learners struggle with recognizing patterns and applying rules. To address this, educators use diagnostic assessments to identify common errors in areas like vowel patterns, suffixes, and irregular words. These evaluations guide targeted interventions. For instance, Arifin and Soviyah (2022) found that online games boosted vocabulary after assessment. Similarly, Aras and Hastini (2023) reported improved scores from spelling bees based on identified errors. Simbeck and Müller (2023) showed that adaptive tools lowered error and dropout rates. These studies highlight the value of diagnostics and engaging strategies in enhancing spelling skills.

Despite various teaching efforts, spelling accuracy remains a challenge for high school students in several countries. In Indonesia, a 2023 study found frequent errors like substitutions and slips among English learners, mainly due to orthographic interference (Muhassin et al., 2023). In Saudi Arabia, high school EFL students showed a high rate of spelling mistakes especially substitutions linked to vowel-rule misapplication and first-language influence (Fitria, 2020). In the United States, studies reveal that spelling remains one of the most common writing errors among high school and college students, despite access to spellcheck tools (Johnson et al., 2021).

Various regions in the Philippines reveal persistent challenges in spelling ability among learners. In Pampanga, around 65% of high schoolers in recent assessments struggle with spelling despite varied teaching strategies often due to over-reliance on digital tools, weak phonetic awareness, and limited vocabulary exposure (Mendoza, 2020). In Santa Mesa, Manila, a 2023 study at Juan Sumulong High School found that Grade 7 students had low baseline spelling skills, with substantial gains only after the implementation of structured literacy and spelling-focused interventions (Del Rosario, 2024). Meanwhile, Buangin & Limbagan (2024) mention that in Camarines Sur, senior high students at Naga View Adventist College showed significant spelling difficulties during the 2022–2023 school year, with spelling linked strongly to deficiencies in reading culture, time management, and grammatical skills.

In the Division of Davao del Norte, specifically at Baltazar Nicor Valenzuela National High School, Grade 7 students demonstrate considerable difficulty with basic English spelling. Although some learners are able to spell words correctly through oral dictation, a significant number commit errors when writing independently. A diagnostic spelling assessment conducted during the first quarter revealed that over 65% of the students scored "Below Basic" in spelling proficiency, as measured by the standards of the Grade 7 English curriculum. These results suggest a lack of mastery in foundational spelling



rules and patterns. Contributing factors include insufficient instruction in phonics and syllabication, as well as limited opportunities for consistent practice. This persistent challenge negatively impacts students' confidence and hinders the development of their written communication skills.

This study is socially relevant as it addresses a critical aspect of literacy development at a crucial stage in education. As spelling accuracy is a foundational skill for effective communication and academic success, this study could offer practical solutions to help students improve these skills in an engaging and interactive way. In relation to this, action research should be conducted to address spelling difficulties of the students for innovative teaching methods to cater to diverse learning needs, foster a positive learning environment, and contribute to the overall educational outcomes of students. This has implications for both teachers and students, encouraging a more active and enjoyable approach to learning while promoting essential skills.

With all these factors, through a meticulous examination of studies concerning the spelling difficulties faced by learners, the researcher has identified three relevant studies. The first is by Alhaisoni et al. (2015), entitled "English Spelling Errors of Saudi EFL Students." This study shows that clear pronunciation instruction, especially for sounds affected by learners' first language, improves spelling by reinforcing sound-letter links. The second study, conducted by Fender (2008) and titled "Spelling and Reading Skills of Arab Learners of English," emphasizes the role of Phonological Awareness Training, which helps learners distinguish unfamiliar English sounds like /p/ and /v/, ultimately reducing both pronunciation and spelling errors. The third study, by Tuan (2010), entitled "Teaching English Spelling Systematically to Vietnamese EFL Students," explores the impact of systematic spelling instruction significantly improves students' writing accuracy and confidence in English orthography.

RESEARCH QUESTIONS

The research questions below were to test the effectiveness of implementing the Word Building Games in improving spelling accuracy and fluency among grade 7 students and their perception towards the new learning strategy.

1. What is the level of spelling proficiency among grade 7 students before the implementation of the Word Building Games?
2. What is the level of spelling proficiency among grade 7 students after the implementation of the Word Building Games?
3. What is the significant difference between pre-test and pot-test employing the Word Building Games?
4. What insights can you share to the school administrators, teachers, and stakeholders about the use of Word Building Games strategy in improving spelling proficiency?





PROPOSED INNOVATION, INTERVENTION AND STRATEGY

Word-building games are highly effective for improving students' spelling accuracy as they make learning interactive, engaging, and fun. These games encourage active learning by requiring students to think critically about letter combinations and word patterns while providing repeated exposure to correct spellings, which reinforces retention. It also promotes social learning, as students can collaborate, share strategies, and learn from each other in a supportive environment. Additionally, the games are easily adaptable to match students' skill levels, ensuring an appropriate level of challenge (Smith, 2021).

To address challenges in spelling accuracy among Grade 7 students, the researchers implemented a three-week intervention called "Word Building Games". This strategy used fun, interactive activities to promote consistent spelling practice. Two different games were introduced each week during one-hour sessions held every Thursday and Friday. In Week 1, students played Anagrams on Thursday and Pyramid Writing on Friday to enhance vocabulary and letter sequencing. In Week 2, they engaged in Spelling Rhyme and Spelling Maze to develop phonemic awareness and visual word recognition. In Week 3, students completed a Word Search on Thursday and Kaboom on Friday to reinforce previous lessons in a fun and fast-paced review. This structured schedule ensured variety, engagement, and support for diverse learners.

Week	Day	Activity/Game	Focus/Objective	Description
Week 1	Thursday	Anagrams	Enhance vocabulary and letter sequencing	- Is a word or phrase formed by rearranging the letters of another word or phrase, using all the original letters exactly once. Example: TIRED=TRIED GAINLY=LAYING SILENT=LISTEN
	Friday	Pyramid Writing	Develop understanding of word structure and letter order	- Is a method of writing spelling words in a pyramid shape. Students start with the first letter of the word at the top of the pyramid and students add one letter as the go down the pyramid. Example the word ADDRESS.



				
Week 2	Thursday	Spelling Rhyme	Build phonemic awareness and rhyming pattern recognition	-Rhyming words are two or more words that have the same or similar ending sound. Example: SUN - RUN NEST - BEST RAIN - PAIN
	Friday	Spelling Maze	Strengthen visual word recognition and pathfinding skills	-A game where students find their way through a maze by spelling words correctly. Spelling mazes can help students practice spelling words and reading and writing skills. Example: 
Week 3	Thursday	Word Search	Review and reinforce previously learned spelling patterns	-A word game where student find hidden words in a grid of letters. The words can be arranged horizontally, vertically, or diagonally. Example: 
	Friday	Kaboom	Fast-paced spelling review; recall under pressure	This game reinforces reading skills like phonics and high-frequency words. Players read word cards to keep them, but "Kaboom!" cards add surprise and excitement to the learning. Example: 

Before the conduct of the study, the researcher worked with the Grade 7 coordinator teacher to select a qualified section based on historical data. Out of three sections, only one met the criteria, totaling thirty-nine (39) students identified with language learning difficulties. A pre-test assessed their initial spelling accuracy and fluency. Afterward, spelling drills and word games were implemented to improve these skills. A post-

test followed to measure progress, and the results were analyzed to evaluate the effectiveness of the strategies.

An orientation introduced the study and intervention to participants, ensuring anonymity and confidentiality. Researchers explained the benefits of spelling exercises and provided an overview of the activities involved. The goal was



to ensure the strategies used meaningfully supported students' spelling development in each session.

This study aimed to evaluate the impact of engaging word-building games on Grade 7 students' spelling accuracy at Baltazar Nicor Valenzuela National High School. It sought to determine whether such interactive strategies could make learning more effective and enjoyable. Word-building games helped students improve spelling by expanding their vocabulary and reinforcing correct spelling. Personalized instruction boosted confidence and accuracy, helping students apply proper spelling in various contexts and supporting overall language development.

After the implementations, the researchers were eager to witness the progress and advancements in spelling accuracy and fluency among the participants. The expectation was for a positive transformation in the academic development of the participants, envisioning heightened success in their educational journey. It was optimistic that the efforts invested in using word-building games contributed to a more successful and enjoyable academic experience for the participants, paving the way for continuous progress and achievement.

METHODOLOGY

This study use quantitative research approach with a pre-experimental, one-group pretest-posttest design. As Thyer (2012) explains, a one-group pretest-posttest design observes one group of participants two times before (pretest) and after (posttest). Studies that involve a specific treatment or intervention are called efficacy studies; they aim to show whether the treatment can create positive outcomes. This design is a helpful method for identifying changes in key indicators that happen before and after the intervention or treatment is applied. This method is essential for conducting this action research, which aims to evaluate the effectiveness of a specific strategy.

In connection, this study was conducted at Baltazar Nicor Valenzuela National High School, a secondary public school situated in Capungagan, Kapalong, Davao del Norte, where many students face challenges with English spelling. Specifically, there was a notable prevalence of spelling difficulties among grade 7 learners. The pre-test, intervention, and post-test was participated by the thirty-nine (39) grade 7-Daisy students enrolled during the academic year 2024-2025 at Baltazar Nicor Valenzuela National High School. The researchers employed purposive sampling in selecting the participants in order to deliberately select individuals who can best provide the necessary insights to meet the study's

objectives. In addition, there are ten (10) participants were selected for the in-depth interview.

Research Respondents

This study was conducted at Baltazar Nicor Valenzuela National High School, a secondary public school situated in Purok 3B, Capungagan, Kapalong, Davao del Norte. In the selection of the participants, the coordinator teacher assisted in identifying Grade 7 students who were qualified for the study. Fritz et al. (2012) advised that a quantitative study conducted with a heterogeneous group should comprise 39 participants; hence, with the help of the Grade 7 coordinator teacher, 39 students were selected to serve as respondents in the study. For the qualitative study a smaller group of participants was also selected through purposive sampling to provide deeper insights (Palinkas et al., 2015). The participants are mainly from Baltazar Nicor Valenzuela National High School. Moreover, this study employed purposive sampling, a type of non-probability sampling that involves the deliberate selection of specific individuals based on their relevance to the research. Curtis et al. (2011) advised that this method is particularly useful when the researcher has specific knowledge about the population and can select a sample that is most representative.

Research Instruments

The study adopted the Barnell-Loft Diagnostic Achievement Test, a research-based standardized spelling test, for both the pre-test and post-test assessments. This test questionnaire served as a tool for gathering quantitative data on students spelling proficiency. There were two sets of questionnaires were administered the pre-test and the post-test. This standardized assessment allowed the researchers to measure students' spelling proficiency before and after the intervention, thus providing a clear basis for comparison and evaluation of their progress.

To support the evaluation process, the range of percentage scores below was used to assess the students spelling ability during the diagnostic and testing phases. This scale was adapted from the framework presented by Westwood (2021), originally designed to assess literacy skills, and was adapted in this study to interpret the spelling proficiency levels of students.

As a reference for interpretation, the following table presents the range of mean scores, their corresponding descriptions, and the interpretation scale. The scale ranges from Very High to Very Low, with corresponding mean values from 94–100 (Very High) to Below 60 (Very Low). The interpretation of these mean percentages provides insights into students spelling abilities and areas for improvement.



Table 1. Range of Mean Percentage

Range of Mean Score	Descriptive Level	Interpretation
94-100	Very High	If the measures described in the spelling proficiency of the students is outstanding.
85-93	High	If the measures described in the spelling proficiency of the students is very satisfactory.
75-84	Average	If the measures described in the spelling proficiency of the students is satisfactory.
60-74	Low	If the measures described in the spelling proficiency of the students is fairly satisfactory.
0-60	Very Low	If the measures described in the spelling proficiency of the students did not meet the expectation.

Data Collection Procedure

The researchers followed the subsequent procedures when collecting the data in order to get the information required for the investigation.

Crafting of Questionnaire - Pretest and Post-test Questionnaires: The researchers utilized the Barnell-Loft Diagnostic Achievement Test, a standardized, research-based spelling test, for both pre-test and post-test assessments. This questionnaire served as the primary tool for gathering quantitative data on students' spelling proficiency.

Questionnaire Validation: The researcher sought validation of the questionnaire from experts or a panel well-versed in questionnaire development to ensure its validity and reliability.

Seeking Permission to Conduct the Study. The researchers asked the school principal to distribute the questionnaires (pre-test) to the identified students. Also, the researcher asked permission to implement the intervention to the identified class group.

Pre-test Assessment Administration: Prior to implementing the intervention, the researcher administered a pre-test to the experimental group. This pretest aimed to gauge the students' baseline performance levels in English words spelling.

Intervention Implementation in Experimental Group: The Word Building Games intervention was implemented with the experimental group every Thursday and Friday during English classes. Researchers facilitated Anagrams, Pyramid Writing, Spelling Rhyme, Spelling Maze, Word Search, and Kaboom activities, focusing on training students in self-directed steps for each game. These interventions actively engaged students in structured and guided spelling practice.

Each game targeted specific spelling skills: Anagrams focused on unscrambling letters with model word references. Pyramid Writing reinforced letter order through step-by-step word building. Spelling Rhyme, practiced common patterns within word families. Spelling Maze involved navigating letter paths. Word Search improved word recognition through puzzles, and Kaboom was a fast-paced game incorporating verbal or written spelling with a competitive element. Instructional materials like whiteboards, PowerPoint, and television were used for clear

modeling, complemented by worksheets for independent practice to reinforce spelling mastery.

Post-test Assessment Administration: After one month of the implementation in experimental group, a post-test was administered to assess the students' progress in English words spelling. This test measured the students' enhanced spelling skills and proficiency after the intervention.

Data Tabulation and Evaluation: The researchers tabulated the gathered pre-test and post-test data by encoding the completed questionnaires into a Microsoft Excel spreadsheet. A statistician then confidentially performed calculations, created tables, and analyzed the data. These tabulated results were the basis for evaluating the intervention's effectiveness in improving students' spelling proficiency.

Data Analysis

Statistical tools are essential for analyzing data and drawing conclusions about a population. This process involves organizing data, summarizing key patterns, and calculating the likelihood of observed results occurring by chance. Data collection, as noted by Buckley et al. (1976), is the systematic gathering of relevant information to address a specific research problem and evaluate outcomes, with researchers employing various methods to answer targeted questions effectively.

This study will utilize a one-group pretest-posttest design to determine the impact of an intervention. Researchers will calculate the mean scores for both pretest and posttest results, describing the overall outcomes before and after the intervention by summing responses and dividing by the number of responses. A paired t-test will then be conducted to establish the statistical significance of any observed differences, aiding in the acceptance or rejection of the null hypothesis by comparing critical points in the pretest and posttest distributions. For qualitative data, an interview guide will be developed, and thematic analysis applied to identify recurring themes by grouping similar ideas into codes and themes. To ensure reliability, a panel of experts will review and validate the identified themes (Braun and Clarke, 2013).



Statistical Tool

The computation of data involved the utilization of statistical tools. These tools were employed to ensure accurate analysis and interpretation of the data.

Mean. This refers to the average and is calculated by dividing the sum of a score of the students in pretest, as well as in the post test. This was used to determine the level of performance of the students before the intervention and after the intervention.

Standard Deviation (SD). Standard deviation remains a fundamental statistical measure representing the spread or variability of scores around the mean, providing insight into the consistency of data (Hancock & Mueller, 2021). In this study, SD was used to evaluate the dispersion of student scores before and after the intervention. A lower standard deviation after the intervention may indicate that students' performances became more consistent. Understanding this variability helps in assessing the reliability of the observed changes.

Paired t-test. Also known as the dependent t-test, compares means and standard deviations between two related groups (Gleichmann, 2020). It's useful for analyzing pretest and post-test data. In this study, the paired t-test determined whether the difference between pretest and post-test scores was statistically significant, helping to assess if observed changes were due to the intervention or chance variation.

Cohen's d. Cohen's d is a widely accepted effect size measure that expresses the magnitude of the difference between two means in standardized units (Lakens, 2021). It aids in understanding the practical significance of the intervention, with higher values indicating stronger effects on student performance. Reporting Cohen's d allows researchers to communicate the impact of the intervention beyond statistical significance. This helps educators and stakeholders make informed decisions based on the effectiveness of the teaching strategy.

Coding. his process aimed to identify, interpret, and extract meaningful patterns, concepts, themes, and relationships within the data. It served to condense, organize, and interpret large volumes of qualitative information, transforming it into a structured format that could be further analyzed and led to the emergence of insights and theories (Saldaña, 2021)

Data Reduction. requires careful decisions about what information to highlight, downplay, or even discard to make the assembled data understandable and relevant to the project's goals (Bengtsson, 2022).

Thematic Analysis. provided a structured approach to analyzing the data. This method allowed researchers to connect the prevalence of certain themes with the overall content, meaning participants' own interpretations were key to understanding their behaviors, actions, and thoughts. Thematic analysis followed interconnected stages: data reduction, data display, and drawing conclusions, all of which were valuable for confirming and interpreting the collected data (Braun & Clarke, 2022).

RESULTS AND DISCUSSIONS

Presented in this chapter are the results or data obtained in the study. The chapter presents the data on the level of performance in spelling accuracy among students in pre-test; the level of performance in in spelling accuracy among students in post-test; and significant difference of the pretest and post-test scores of the students.

Research Objective No.1: What is the level of spelling proficiency among grade 7 students before the implementation of the Word Building Games?

To satisfy the first objective, the study adopted the Barnell-Loft Diagnostic Achievement Test, which was used to determine students' level of spelling proficiency before the implementation of the Word Building Games strategy. Shown in Table 2.1 are the mean average of the scores of the students before the implementation of the intervention

Table 2.1
Mean Average of the Scores in Pre-test

PRE-TEST SCORE	FREQUENCY	PERCENTAGE
10	2	5.10%
11	2	5.10%
13	2	5.10%
15	1	2.60%
16	2	5.10%
17	1	2.60%
18	1	2.60%
19	1	2.60%
20	3	7.70%
24	2	5.10%
25	4	10.30%
26	2	5.10%
28	1	2.60%
29	1	2.60%
30	1	2.60%



31	2	5.10%
32	4	10.30%
33	1	2.60%
34	1	2.60%
35	1	2.60%
36	1	2.60%
37	3	7.70%
Total	39	100%
Standard Deviation		8.47
Overall Mean		24.49
Description		Very Low

Presented in Table 2.1 are the results of the pre-test, indicating the spelling proficiency levels of 39 students before the implementation of the intervention. The highest score is 37, achieved by 3 students, while the lowest score is 10, also achieved by 2 students. The most frequent score is 25 and 32, with a frequency of 4. In the pre-test, only three passed.

The mean score for the pre-test was 24.49 with a standard deviation of 8.47. This indicates a very low level of variability in the students' spelling proficiency before the intervention.

In connection, the same diagnostic achievement test identified ten spelling areas as the weakest. It was found that students struggled with the following spelling areas: short vowels,

contractions, adding ending, syllables compound words, syllables prefix suffix, common endings, all principles, syllable v/cv, diphthongs, and vowels digraphs. This aligns with recent study of Williams & Novelli (2025) found that fine-grained error analysis uncovers persistent phonological, orthographic, and morphological errors in these same areas. Lee et al. (2023) showed that morphological awareness of prefixes, suffixes, and syllable structure strongly predicts spelling success. Moreover, Witzel and Galuschka (2024) conducted a randomized controlled trial using a digital game-based spelling intervention that significantly improved spelling of digraphs, morphological endings, and vowel patterns. The table presents the mean scores and descriptions for each area, based on the Barnell-Loft Diagnostic Achievement Test.

Table 2.2
Summary on the Level of Spelling Proficiency among Grade 7 Students before the Implementation of the Word Building Games.

Indicator	Mean	Description
Short Vowels	51.28	Very Low
Contractions	34.87	Very Low
Adding Ending	55.38	Very Low
Syllables Compound Words	77.82	Average
Syllables Prefix Suffix	39.49	Very Low
Common Endings	55.90	Very Low
All Principles	47.69	Very Low
Syllable V/CV	57.44	Very Low
Diphthongs	37.44	Very Low
Vowel Digraphs	37.44	Very Low
Total	48.47	Very Low

The table presents mean scores for various spelling proficiency indicators, all categorized as "Very Low." For instance, the mean score for contractions is 34.87, indicating that students struggle significantly in this area. This finding is consistent with Magpatoc et al. (2024), who observed that frequent use of contractions negatively correlates with overall spelling proficiency. Similarly, diphthongs and vowel digraphs both have mean scores of 37.44, suggesting persistent difficulties with vowel-based spellings. Sammour Shehadeh et al. (2025) support this observation, noting that learners tend to show lower accuracy with vowel related spellings compared to consonant-based ones. The syllables compound words indicator, though slightly higher at 72.82, still falls under the "Very Low" category. This aligns with Lazarus and Audu (2023), who emphasized that morpheme awareness, including compound

word construction, is essential for improved spelling performance.

Furthermore, the all principles indicator yielded a mean score of 47.69, reflecting a general weakness in orthographic and morphological awareness. This is supported by Treiman et al. (2025), who highlighted the foundational role these skills play in spelling development. In the same way, the short vowels category recorded a mean of 51.28, again pointing to student difficulty with vowel patterns, as noted by Sammour Shehadeh et al. (2025). The indicators for adding endings (55.38) and common endings (55.90) reveal slightly better performance, yet the scores remain in the very low range. These results are reinforced by Lazarus and Audu (2023), who found that explicit instruction in suffixation plays a crucial role in enhancing



spelling skills.

In addition, the syllable V/CV indicator shows a mean of 57.44, remaining within the poor performance range. This finding is supported by Biancarosa (2023) in the University of Oregon's DIBELS 8 Administration and Scoring Guide, which underscores the importance of vowel-consonant segmentation in spelling development. Additionally, the syllables prefix and suffix indicator reveal a mean of 39.49, highlighting substantial challenges in affix understanding a difficulty again supported by Lazarus and Audu (2023). Overall, the total mean score of 48.47 reflects a consistent and widespread issue with spelling proficiency across all assessed areas.

Therefore, these findings highlight the spelling inaccuracies can hinder students in multiple ways, including causing misunderstandings in written communication that lead to confusion and misinterpretation of their intended messages.

Given the prevalence and persistence of these spelling errors, a targeted spelling intervention is crucial. Such an intervention would address the root causes of these errors, improve readability and comprehension, and enhance overall communication skills. This, in turn, would help learners overcome the barriers posed by spelling inaccuracies, supporting their educational and professional development.

Research Objective No.2: What is the level of spelling proficiency among grade 7 students after the implementation of the Word Building Games?

To satisfy the second objective, the researcher administered a post-test adopted from the Barnel-Loft Diagnostic Achievement Test. Shown in Table 3.1 are the mean average of the scores of the students after the implementation of the Word Building Games.

Table 3.1
Mean Average of the Scores in Post-test

POST-TEST SCORES	FREQUENCY	PERCENTAGE
34	1	2.60%
35	1	2.60%
37	1	2.60%
38	3	7.70%
39	2	5.10%
40	2	5.10%
41	1	2.60%
42	2	5.10%
43	7	17.90%
44	2	5.10%
45	3	7.70%
46	2	5.10%
47	3	7.70%
48	5	12.80%
49	1	2.60%
50	3	7.70%
Total	39	100%
Standard Deviation		4.25
Overall Mean		43.56
Description		High

Presented in Table 3.1 are the results of the post-test, showing the spelling proficiency levels of 39 students after the intervention. Three students scored the highest (50), one scored the lowest (34), and 43 was the most frequent score, recorded by 7 students. In total, 37 students passed. After the application of the Word Building Games intervention, the mean score increased substantially to 43.6 with a standard deviation of 4.25, showing not only an increase in scores but also a decrease in variability, suggesting a more consistent improvement among the students. These results align with Cruz and Mendoza's (2023) claim that game-based spelling activities enhance engagement and retention of correct spelling patterns. Likewise, Lopez et al. (2024) stated that spelling interventions

using interactive tools yield measurable improvement in learner outcomes. Villanueva (2023) further emphasized that diagnostic assessments after targeted instruction reflect genuine learning progress.

In relation, the following table presents the mean scores and corresponding descriptions for various spelling proficiency indicators as identified by the Barnel-Loft Diagnostic Achievement Test after the implementation of the Word Building Games.



Table 3.2

Summary on the Level of Spelling Proficiency among Grade 7 Students after the Implementation of the Word Building Games.

Indicator	Mean	Description
Short Vowels	94.87	Very High
Contractions	89.23	High
Adding Ending	85.13	High
Syllables Compound Words	93.85	High
Syllables Prefix Suffix	92.31	High
Common Endings	80.00	Average
All Principles	81.54	Average
Syllable V/CV	87.18	High
Diphthongs	88.72	High
Vowel Digraphs	78.46	Average
Total	87.13	High

The data from the initial table reveals consistently high mean scores across various spelling proficiency indicators indicate strong performance among learners. For instance, students exhibit a solid understanding of short vowels (94.87), which is supported by Hall (2021) and Hood (2023), who emphasize the effectiveness of explicit short vowel instruction in improving phonics and spelling. Similarly, the learners demonstrated strong proficiency in syllables and compound words (93.85), consistent with findings by Moats and Foorman (2023), who highlight the role of syllable segmentation and blending activities in developing literacy skills. In terms of syllables with prefixes and suffixes (92.31), Snow (2025) affirms that morphological instruction, including the teaching of affixes, significantly enhances spelling competence.

In addition, students also performed well in recognizing contractions (89.23), which aligns with the study by Orbe (2022), emphasizing the need for focused instruction on contractions to ensure spelling accuracy. Their ability to apply the V/CV syllable pattern (87.18) is likewise supported by Hood (2023), who stresses the importance of teaching vowel-consonant relationships for improved orthographic understanding. When it comes to adding endings to base words (85.13), findings from Smith (2025) indicate that structured word-building involving suffixes helps reinforce spelling rules.

Moreover, learners' understanding of diphthongs (88.72) also reflects proficiency, as confirmed by Hood (2023),

who recommends direct instruction in complex vowel patterns such as diphthongs. Although vowel digraphs (78.46) show some room for improvement, they still indicate a generally proficient level, consistent with Hood's (2023) assertion that targeted support in vowel combinations aids spelling accuracy. Performance in common endings (81.00) and overall principles (81.54) is supported by Link (2021), who both emphasize the value of systematic instruction and spelling rule application. The overall mean score of 87.13 underscores their overall strength in spelling proficiency. This significant improvement from the "Very Low" category prior to the intervention suggests that the Word Building Games was highly effective in enhancing the learners' spelling skills.

Significance Difference Between the Pre-test and Post-test Scores

A total of 39 students participated in this study, where their spelling proficiency was measured both before and after using the Word Building Games strategy. As presented in Table 4, the pre-test and post-test scores were compared to determine the effectiveness of this intervention.

The t-test for dependent samples was employed to compare the pre-test and post-test scores, $t(38) = 19.1$, $p < .001$. Since the p-value is significantly lower than the alpha level of 0.05 ($\alpha = 0.05$), we reject the null hypothesis that there is no difference between the pre-test and post-test scores.

Table 4.
Significant Difference Between the Pre-Test and Post-Test Scores

Significant Difference Between the Pre-Test and Post-Test Scores							
Type of Test	N	df	Mean	SD	t-value	p-value	Decision
Pre-Test	39	38.0	24.49	8.47	19.1	<.001	Significant
Post Test	39		43.56	4.25			
					Cohen's d = 3.05		
					SE Cohen's d = 1		

Based on the results it was found that there is a significant difference between the pretest and post-test score of the students. This indicates that the Word Building Games intervention effectively enhances students' spelling proficiency. This finding supports the research conducted by Nurdina (2021), emphasized Word Building Games provides

improvements in spelling skills align with findings that various word games effectively enhance students' literacy outcomes, including vocabulary acquisition, which in turn supports spelling proficiency. This principle directly supports the effectiveness of word-building games.

In summary, the results from this study clearly indicate that the



Word Building Games intervention has a substantial positive impact on improving students spelling proficiency. The significant increase in mean scores from the pre-test to the post-test, coupled with the high t-value and low p-value, strongly supports the effectiveness of this instructional approach. These findings are consistent with recent studies such as Morales (2025), who reported a significant gain in students spelling scores after using the Word venture game-based method, and Mathis (2023), whose research demonstrated reduced spelling errors among students following daily word-game play. Similarly, in the study of Holz et al. (2024) a digital spelling game intervention showed statistically significant improvements in both foundational literacy skills and overall spelling accuracy. Educators may consider adopting the Word Building Games strategy as a part of their teaching methods to facilitate better spelling skills among their students.

Research Question No.4: What are the insights of students about the use of Word Building Games strategy in improving spelling proficiency?

To answer this research question, in-depth interviews were conducted with the participants. Probing questions were asked to elicit their responses regarding their observation and experiences with the impact of the Word Building Games in improving spelling proficiency among grade 7 students. The major themes and sample statements for research question number 2 are presented in Table 4. Participants shared their responses about their own experiences and observation of the intervention. From the answers of the participants, five major themes emerged: (1) deriving enjoyment and learning from spelling activities; (2) suggestions to make spelling activities more fun (3) consistent practice as a key to improvement; and (4) using various instructional materials and strategies as essential; and (5) being open for corrections and assistance from others.

Table 5

Themes and Sample Statements on the Insights of Students in the Word Building Games Strategy in Improving Spelling Proficiency

Essential Themes	Supporting Statements
Deriving Enjoyment and Learning from Spelling Activities	<ul style="list-style-type: none"> • “One is of course reading, it's either you can read with your friends or you can play games where your friend is the teacher and you are the student, she tells you the words you need to spell, and if there's a wrong spelling she can correct it.” –IDI01 • “Use games, technology, themed lists, and team challenges to make learning fun.” – IDI02 • “Spelling can be easier to learn when it's fun, like using games or puzzles.” –IDI03 • “Interacting with students helps them to focus and make it funnier to spell.” -IDI04
Suggestions to Make Spelling Activities More Fun	<ul style="list-style-type: none"> • “Doing things like word games and writing stories helped me get better at spelling.” - IDI03 • “They should do more activities like this so that the students can learn more or improve their skills in spelling.” –IDI05 • “I suggest including interactive games like spelling charades or digital apps that feel like games, and group competitions.”–IDI06 • “For me, we also need an integrating activity that involves games while also learning spelling.” –IDI08 • Activities like word-building helped me focus more on how words are formed.” –IDI08
Consistent Practice as a Key to Improvement	<ul style="list-style-type: none"> • “It helps you a lot, especially if you struggle with spelling, just like me, it's not always that everyone is good at one thing without practicing it, as long as you believe in yourself.” –IDI01 • “Consistent practice, even short sessions, builds muscle memory and automaticity.” – IDI02 • “My advice: keep trying, practice a lot, and don't worry about mistakes, they help you learn.” –IDI03 • “Stay consistent in learning but don't forget to ask help and if they correct you maybe you need to accept it so that you will be able to learn, understand, and Improve.” – IDI04 • “Consistent practice of spelling also increases vocabulary and overall understanding of words.” –IDI04 • “I learned that even just a small amount of practice every day can really improve spelling skills, like reading books to avoid forgetting difficult words.” –IDI06 • “We really need to regularly practice spelling at home to improve our spelling skills.” –IDI07 • “Skipping practice made me forget, but consistency helped me retain more.” –IDI10



<p>Using Various Instructional Materials and Strategies as Essential</p>	<ul style="list-style-type: none"> • “Visual aids, saying words aloud, and understanding word meanings were helpful.” – IDI02 • “Trying different ways, like saying words out loud or using flashcards, made spelling easier to understand.” – IDI03 • “Different strategies of spelling can effectively enhance students’ performance in spelling.” – IDI04 • “Using different strategies like storytelling with spelling drills helped me realize that spelling is not just about memorization.” – IDI06 • “My point would be, teachers also need to employ different strategies such as flipcharts to be read every day since students are diverse and they have different preferences to learn.” – IDI07 • “Strategies like breaking words into syllables helped me spell longer words.” – IDI08 • “Doing things like word games and writing stories helped me get better at spelling and remembering words.” – IDI09 • “Be patient, persistent, use varied strategies, and ask for help.” – IDI10
<p>Being Open for Corrections and Assistance from Others</p>	<ul style="list-style-type: none"> • “To make it easier the spelling allow yourself to ask your parents or sister to teach you, so that it will improve my spelling skills.” – IDI05 • “To improve or enhance my skill on spellings. We need to collaborate others and maybe we ask help so that we easily understand some terms that we are not able to spell it correctly.” – IDI07 • “Part of being a student is to ask help to those who are proficient. So, we need a mentor and allow also teachers to help us.” – IDI08 • “In learning spelling it is not easy to isolate yourself but you need to have open mindedness and allow yourself to ask to teach you because some of the time you know the pronunciation but you don’t know how to spell it. So, my recommendations would be asking help to others.” – IDI10

The first theme that emerged under insights was deriving enjoyment and learning from spelling activities. Students reported deriving enjoyment and learning from interactive, game-based spelling activities like puzzles and team challenges. These engaging methods boosted their interest, enhanced learning, and improved spelling retention. Research supports this, with studies showing game-based activities, such as Scrabble, significantly improve vocabulary mastery (Cahyani et al., 2024). This is further supported by Pratawi et al. (2021), who found that students participating in Spelling Bee games demonstrated significantly improved vocabulary compared to those taught with traditional methods, emphasizing the importance of enjoyable, interactive activities for motivation and learning effectiveness.

Furthermore, the second theme was about suggestions to make spelling activities more fun. The participants suggested using word games, interactive apps, and group competitions to make learning both fun and effective were highlighted for improving accuracy, encouraging participation, and deepening understanding of word formation. This aligns with Mensah et al. (2022), who found that language games significantly improved spelling abilities, boosting student motivation and retention over traditional methods. Similarly, Baranek (2021) supports that integrating fun, interactive activities like digital apps, word games, and group competitions into spelling instruction enhances engagement, accuracy, and retention, emphasizing that enjoyment significantly improves learning outcomes.

Besides, the third theme was the consistent practice as a key to improvement, as expressed by participants who emphasized its impact on memory, confidence, and skill retention. Students found that even brief, regular sessions significantly aided vocabulary development and recall. This aligns with research on the Cover-Copy-Compare (CCC) strategy, which demonstrated how regular practice with immediate feedback significantly enhances spelling proficiency, memory, accuracy, and confidence (Dela Cruz & Santos, 2023). Similarly, Sung et al. (2021) found that consistent and spaced practice improved spelling accuracy and retention of rules, building "muscle memory" and automaticity, which in turn made spelling more fluent and reduced errors.

Moreover, the fourth theme is the using various instructional materials and strategies as essential. The students found that using visual aids, saying words aloud, and incorporating strategies like flashcards and syllable breakdowns significantly helped them understand and remember spelling more effectively. Strategies like storytelling and daily practice with tools such as flipcharts were identified as essential for addressing diverse learning preferences and enhancing spelling performance. This aligns with research by Niolaki et al. (2021), who found that combining visual imagery and flashcards led to significant improvements in spelling accuracy and retention for bilingual learners. Similarly, Nguyen and Brown (2023) demonstrated that multisensory approaches, including saying words aloud, storytelling, and syllable breakdown, significantly enhanced students' spelling accuracy and retention, underscoring the value of varied, multimodal instruction.



In addition, the fifth theme was the being open for corrections and assistance from others. The participants highlighted the value of seeking help from parents, teachers, and peers to improve spelling. They believe collaboration aids in understanding difficult words and correcting errors, showing that spelling improves through support and teamwork. A study by Lyytinen et al. (2021) supports this idea, highlighting that students benefit from structured support, whether through digital tools or collaborative learning environments. This suggests that collaborative learning and seeking help from others can significantly enhance the spelling development process. For instance, a study by Li (2025) highlights the powerful role of collaborative learning in enhancing student engagement, including spelling. It reveals that students learn more effectively when they interact with peers, share ideas, and remain open to feedback and corrections. This openness to assistance promotes deeper understanding, especially in complex areas like spelling, where peer guidance and group support significantly boost learning outcomes.

CONCLUSION

The research study aimed to enhance spelling accuracy and fluency among Grade 7 learners through the implementation of the Word Building Games. Before the implementation of the intervention, the students exhibited 'Very Low' spelling proficiency, as indicated by their pre-test scores ranging from 10 to 37. They struggled particularly with contraction, syllables, prefix suffix, all principles, diphthongs, and vowel digraphs.

In response to this problem, the researchers introduced Word Building Games, which led to a significant improvement in the students' spelling. Their post-test scores jumped from 34 to 50, showing they made substantial gains in all areas they struggled with before, including short vowels, compound words, and syllables with prefixes and suffixes, reaching a 'Very High' proficiency level in these areas.

The study revealed significant difference between students' pre-test and post-test spelling scores, as confirmed by a Paired T-test. This clearly shows that the Word Building Games intervention was highly effective in improving spelling accuracy and fluency among Grade 7 students.

To conclude, the findings and insights from the interview reveal that Word Building Games make learning fun and engaging. By using various instructional materials and strategies, they help school administrators, teachers, and stakeholders by leading to improved recognition of word patterns, which directly contributes to better reading comprehension and written communication across all subjects. Teachers and students may have acknowledged the Word Building Games' effectiveness in improving spelling skills, emphasizing their practical implementation and the opportunities they provided for self-monitoring, immediate feedback, and self-correction.

RECOMMENDATION

Based on the findings of the study, it is recommended that educators consider implementing the Word Building Games in improving spelling accuracy and fluency among Grade 7 students. It is essential for educators to create a supportive

classroom environment that encourages collaboration and peer learning while using the Word Building Games strategy. By promoting group activities and peer discussions, students can share strategies and insights, further reinforcing their understanding of spelling rules and patterns. The strategy not only improved students' ability to recognize word patterns but also boosted their self-confidence, retention of spellings, and overall accuracy in spelling. Teachers should integrate the Word Building Games strategy into their teaching methodologies to provide students with regular opportunities for self-monitoring, immediate feedback, and self-correction, thereby fostering a more engaging and effective learning environment for spelling development.

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