



IMPROVING SPELLING ACCURACY IN ELEMENTARY STUDENTS: THE IMPACT OF SPELLING GAMES AS AN INTERVENTION

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Article DOI: <https://doi.org/10.36713/epra22593>

DOI No: 10.36713/epra22593

ABSTRACT

This study, conducted at Marcos P. Estoque Elementary School in Capungagan, Kapalong, Davao del Norte, Philippines, investigated the effectiveness of Spelling Games intervention in improving the spelling proficiency of Grade 6 students. The intervention was introduced in response to persistent spelling difficulties identified among the learners. The primary objectives of the research were to assess students' spelling proficiency levels before and after the implementation of the spelling games and to evaluate the overall impact of the intervention on their spelling skills. Furthermore, the study aimed to gather student feedback regarding their experiences with the spelling games and how these influenced their learning. A quantitative-descriptive research design was employed, complemented by qualitative insights through interviews, to provide a well-rounded analysis of the learners' spelling challenges and the effectiveness of the intervention. A total of 42 Grade 6 students participated in the pre-test, the spelling games sessions, and the post-test. Additionally, seven students were selected for in-depth interviews to offer more detailed perspectives. Results from the Barnell-Loft Diagnostic Achievement Test revealed that students initially demonstrated very low spelling proficiency across various components. However, post-intervention assessments showed a marked improvement, with participants achieving significantly higher scores in the same areas. Descriptive statistics revealed that the students' mean score in the pre-test was 11.0 (SD = 5.82), while the post-test mean score increased significantly to 22.5 (SD = 2.40), indicating substantial improvement in spelling proficiency following the intervention. A paired sample t-test confirmed that this difference was statistically significant, $t(41) = 18.3$, $p < 0.001$, with a large effect size (Cohen's $d = 2.82$), suggesting that the spelling games had a strong and meaningful impact on enhancing the students' spelling skills. The findings underscored the positive impact of the spelling games, which not only enhanced students' understanding and appreciation of spelling but also increased their motivation, engagement, and confidence. The intervention also fostered better spelling practice habits beyond the classroom and helped reduce students' anxiety and fear of making mistakes.

KEYWORDS: Spelling Games Intervention, Barnell-Loft Diagnostic Achievement Test, Quantitative-Descriptive, Spelling Proficiency, Philippines

INTRODUCTION

Spelling is a foundational skill that plays a critical role in students' overall literacy development. It is important as it helps link letters to their corresponding sounds, and words to their meanings. This, in turn, supports the development of reading and writing skills, ultimately improving language proficiency. According to Hofslundsengen et al. (2023), early and targeted spelling instruction can lead to both immediate and sustained academic gains, reinforcing its importance in literacy education. Witzel et al. (2023) also emphasize the crucial role of spelling interventions in developing foundational literacy skills. However, despite the growing focus on literacy

education, spelling difficulties remain a persistent issue in classrooms worldwide. Therefore, a study conducted by (Eliot, 2022) found that it is essential to explore effective interventions for students who struggle with spelling, as these can have a significant impact on their future academic achievement.

Consequently, this phenomenon occurs in Punjab, Pakistan. According to Imtiaz et al. (2023), most students at High School Kangan Pur in District Kasur made spelling errors related to omission, substitution, insertion, and transition. The students struggled with spelling accuracy due to factors such as limited vocabulary, lack of reading habits, poor self-concept,



insufficient motivation, and difficulties with the spelling system. Additionally, their mother tongue, the education system, untrained English teachers, weak reading and listening skills, and inadequate proofreading contributed to these spelling mistakes. Furthermore, the study revealed that the Saudi students majoring in English made a range of spelling mistakes. The identified spelling error types in the students' translation work included: capitalization mistakes, omissions, substitutions, unique errors, errors that hinder understanding, additions, incorrect word segmentation, transpositions, grapheme substitutions, errors influenced by the first language and misuse of word meanings (Alenazi et al., 2021). Moreover, (Limpo et al., 2020) highlighted the significant challenge of spelling errors among Portuguese schoolchildren, revealing that misspellings remain a persistent issue across different grade levels and writing tasks. These spelling issues had a notable impact on overall text quality, especially for younger students.

In the Philippines, particularly in San Juan Elementary School, many English learners, face challenges with spelling, which can be attributed to several factors such as the irregular nature of English spelling and interference from their native language. The primary cause of these spelling errors was found to be the incorrect use of vowels and pronunciation. The study highlights the need for greater focus on addressing spelling errors, as teaching spelling is a crucial part of language acquisition (Coronado, 2024). In addition, in Iloilo City, spelling challenges highlight a common issue among students—their difficulty in accurately spelling words in their written work. Many of these words are hard to spell because their spelling does not always match how they are pronounced. A single sound may have multiple spellings, and a single letter or letter combination can represent different sounds. These irregularities and complexities likely contribute significantly to students' struggles with spelling (Sobrepeña, 2022). Moreover, Saavedra & Barredo, (2020) found that elementary students in the Division of Makati City identify several key challenges that hinder their writing proficiency. These include difficulties with spelling, grammar, and sentence construction that limits them in expressing their thoughts clearly, and often perceive writing as a particularly challenging task.

In the Division of Davao del Norte, particularly at Marcos P. Estoque Elementary School, it has been spotted that there have been students that are struggling in spelling words correctly. Many grade 6 students struggle with spelling, often getting confused when encountering unfamiliar words. Based on our observations and teacher reports, these spelling challenges negatively affect students' confidence and participation. Spelling quizzes conducted by the English teachers show a high rate of spelling errors, even among words included in standard vocabulary lists for the grade level. As a result, they may be reluctant to participate in activities that involve writing on the board and often refrain from taking notes during lessons. This suggests that spelling challenges are not just limited to complex or unfamiliar words, but also affect everyday vocabulary. Despite repeated exposure to these words, students continue to make errors, indicating that the issue may stem from inconsistent practice, or inadequate strategies for retaining spelling patterns. These persistent mistakes can hinder their

overall writing skills, making it difficult for them to express themselves clearly and accurately in written form.

In addition, there were various studies that were being conducted which is somewhat similar to this study such as the study being conducted by (Chakkalathy & Mahamuni, 2022) entitled "Improving Students English Spelling Ability Through Activity-Based Teaching-Learning", the study of Viador et al., (2025) entitled "Improving Spelling Skill Of Elementary Pupils Through Spelling Game Relay" and that of Staden (2011), entitled "Improving the spelling ability of Grade 3 learners through visual imaging teaching strategies" These studies have offered valuable insights into improving students' spelling abilities; however, there remains a gap in the existing action research. The specific focus and interventions being explored by these studies are not directly meet the needs of our target participants which consists of Grade 6 learners. As a result, further investigation is necessary to identify strategies and interventions that are specifically tailored to address the spelling challenges faced by these identified grade 6 students. Also, the study of using quantitative-descriptive data to address spelling difficulties remains relatively rare. Thus, all these premises led the researchers to conduct this study.

This study seeks to implement spelling games as a method to improve spelling challenges among Grade 6 learners. The researchers emphasize the need to strengthen spelling skills of grade 6 students who are currently at the instructional or frustration level. The ultimate goal is to contribute to the development of school initiatives, with the intention of developing intervention programs intended to address students having spelling difficulties.

RESEARCH QUESTIONS/OBJECTIVES

The research questions below are to investigate reasons on how to address spelling difficulties on Elementary learners particularly on the grade 6 pupils. The research questions that guided this study are the following:

1. What is the level of spelling ability among grade 6 students before the implementation of the spelling games intervention?
2. What is the level of spelling ability among grade 6 students after the implementation of the spelling games intervention?
3. Is there a significant difference between the pre-test and post-test scores of the pre-experimental group?
4. What insights can be drawn from the implementation of spelling games intervention regarding their effectiveness in enhancing students spelling abilities?

PROPOSED INTERVENTION/ACTION PLAN

On the first week of implementation, a pre-test was administered using a 25-item test based on a material from the Barnell Loft Diagnostic Achievement Test in Spelling (BLDAT). This is a standardized test designed to serve two purposes: it measures spelling ability and diagnoses spelling deficiencies. Also, the "Spelling Games" intervention was introduced to the students. This educational strategy engages students in various spelling activities such as Word Mapping, Build with Blocks, Flower Power, Tic-Tac-Toe, Spin It-Spell



It, and Boggle game. By using these variety of fun and engaging methods, students are able to actively practice and apply spelling rules in different contexts, which can significantly boost their spelling accuracy and confidence. Additionally, the games provide instant feedback, allowing students to correct mistakes in real time and track their progress over time. Moreover, the "Spelling Games" intervention was introduced over the course of three weeks, with each week focusing on a two different activity to reinforce spelling skills.

In Week 2, students were engaged in Word Mapping activity wherein the researchers provided a list of words along with the word mapping sheet, enabling learners to identify the correct sequence of letters and spell the words correctly. The second activity was Build with Blocks, wherein students physically construct words with letter blocks, reinforcing spelling through hands-on learning and verbal explanation.

In Week 3, Flower Power was used to incorporate creativity and visual learning, with students forming words base on the letters from the petals of a flower. The second activity was Tic-Tac-Toe, where students would spell words correctly to claim a spot on the tic-tac-toe board by placing X's and O's. This activity encourages both friendly competition and spelling practice among the students.

In week 4, the researchers introduced Spin It-Spell It, a game where students spin a wheel to select a word category (such as Syllable Count words, Silent Consonants words, Spelling Demons, Contraction words, and Final "y" words), then must spell a word from that category correctly. The second game was the Boggle Game, where students used a grid of lettered dice to form as many words as possible within a set time limit. They would work individually, in pairs, or groups looking for words by connecting adjacent letters in any direction. This activity encourages quick thinking, improves word recognition, and reinforces spelling patterns in a fun, competitive format. This would be a great conclusion to the series of spelling activities, further boosting students' spelling confidence and helping them apply the rules and patterns they've learned throughout the previous weeks.

Finally, the effectiveness of the spelling games intervention was evaluated through a post-test using a 25-item parallel test adapted from the BLDAT. This assessment will measure how well students have applied the strategies to improve their spelling ability. It would serve as a means to assess the impact of the intervention on their spelling skills, providing valuable feedback on the effectiveness of the instructional approach throughout the study.

Week	Day	Activities	Objectives
1	Day 1	Introduction Phase Pre-Test	To determine students spelling abilities and diagnosis their spelling deficiencies using Barnell Loft Diagnostic Achievement Test in Spelling.
2	Day 2	Implementation Phase <ul style="list-style-type: none">Word Mapping	To improve students spelling abilities through Spelling Games intervention.
	Day 3	<ul style="list-style-type: none">Build with Blocks	
3	Day 4	<ul style="list-style-type: none">Flower Power	
	Day 5	<ul style="list-style-type: none">Tic-Tac-Toe	
4	Day 6	<ul style="list-style-type: none">Spin It-Spell It	To assess the improvement of students spelling abilities after the intervention.
	Day 7	<ul style="list-style-type: none">Boggle Game	
	Day 8	Assessment phase Post-Test	

RESEARCH METHODOLOGY

Research Design

This study utilized a quantitative-descriptive research method with a one-group pretest-post-test design, which is a type of pre-experimental approach. In this design, the same group of participants is evaluated at two different times: before (pretest) and after (posttest) the intervention. The goal is to measure changes resulting from the intervention by comparing the initial (baseline) and final (end-line) values. Unlike experimental designs, pre-experimental designs do not have a control group for comparison; instead, they focus on observing changes within a single group over time. Any differences between the baseline and end-line values are attributed to the intervention, suggesting its effect on the outcomes (Wamunyima & Nyirenda, 2023).

In this study, the one-group pretest-post-test design is employed to evaluate the effectiveness of Spelling Games as an intervention to enhance spelling skills among Grade 6 students.

By assessing students' spelling abilities before and after incorporating various fun and engaging spelling games, the study aims to determine whether these interventions lead to meaningful improvements. The design focuses on changes within the same group of students, with pretest and posttest results offering a direct comparison of their spelling performance, attributing any differences to the intervention. This approach is appropriate for the study as it aims to measure the direct impact of Spelling Games on students' spelling abilities.

Research Participants

This research study involved 42 sixth-grade students from Marcos P. Estoque Elementary School. These students were selected based on their scores in both instructional and frustration levels. The study focused on improving the spelling skills of these students, who were specifically chosen because they were transitioning from elementary to secondary school. The intervention used in the study was the Spelling Games



method, designed to enhance spelling abilities and help students write words correctly. The study aimed to improve the spelling skills of students who were struggling and has difficulty in spelling words, particularly those transitioning to secondary school.

Instruments of the Study

The researchers used the Barnell Loft Diagnostic Achievement Test in Spelling (BLDAT) to assess the learners' spelling abilities both before and after the implementation of the Spelling games intervention, allowing for a clear measure of progress. The test includes five key indicators: Syllable Count words, Silent Consonants words, Spelling Demons, Contraction words, and Final "y" words. Each indicator comprises of five items a total of 25 items overall. The pre-test will function as an initial assessment, highlighting students' existing spelling

abilities and any areas of difficulty. Through the use of this diagnostic method, the researchers intend to measure the impact of the intervention on improving the students' spelling skills.

After the intervention, the post-test will be conducted to measure improvements in their spelling skills, allowing for a clear comparison of performance between the two testing phases. By comparing pre- and post-intervention results, the study aims to determine the effectiveness of the spelling games strategy in improving spelling proficiency. This organized method provides a reliable, consistent, and data-supported evaluation of the students' learning results. This range of percentage score below was adopted from the study of Magpatoc et.al, (2024) which was used to measure the spelling proficiency of the students.

Range of Mean	Descriptive Level	Interpretation
91-100	Very High	If the measures described in the spelling proficiency of the students is outstanding.
76-90	High	If the measures described in the spelling proficiency of the students is very satisfactory.
61-75	Average	If the measures described in the spelling proficiency of the students is satisfactory.
51-60	Low	If the measures described in the spelling proficiency of the students is fairly satisfactory.
0-50	Very Low	If the measures described in the spelling proficiency of the students did not meet the expectation.

Procedure

The researchers conducted assessments before and after the intervention to evaluate its effectiveness. The pre-test aimed to measure the spelling difficulties of students prior to the intervention, while the post-test was designed to assess their knowledge and progress by using the same set of spelling words as in the pre-test. To gather the necessary data, the researchers followed these steps: First, they obtained approval from the school principals where the participants were enrolled. Next, they administered a pre-test to assess the initial spelling challenges of the students. Afterward, the Spelling Games strategy was introduced, followed by an eight-week intervention period. At the conclusion of the study, a post-test was given using the same set of spelling words as the pre-test to evaluate any improvements in the students' spelling abilities. The data from both the pre-test and post-test were then collected and analyzed.

Data Analysis

The analysis of the data involved the use of statistical tools to ensure accurate evaluation and interpretation of the students' spelling ability before and after the intervention.

Mean. This refers to the average and is calculated by dividing the sum of a score of the students in pre-test, as well as in post-test. This would be use to assess the students' performance levels before and after the implementation of spelling games intervention.

Paired t-test. Also referred to as a dependent or correlated t-test, is a useful statistical method for comparing the means and standard deviations of two related groups (Gleichmann, 2020). In this study, the paired t-test was used to determine whether

there is a statistically significant difference between the average scores of the pre-test and post-test. This allowed the researchers to assess whether the changes in mean scores were significant or simply due to random variation. By comparing the pre-test and post-test data, the paired t-test became a crucial tool for identifying and measuring any changes or improvements resulting from the research intervention.

Cohen's d. Is a statistical measure used to assess the effect size between two groups, commonly in experimental or pre-experimental designs (Cohen, 1988). In the context of the study, Cohen's d will be used to evaluate the effectiveness of the Spelling games intervention on Grade 6 learners' spelling abilities. By calculating the effect size between students' pre-test and post-test scores, the study will determine not only if there is a statistically significant improvement in spelling skills but also the practical significance of the change.

Standard deviation. Standard deviation was used to assess variability in students' spelling abilities before and after the Spelling games intervention. Comparing the pre-test and post-test standard deviations reveals how consistently students improved. A notable decrease would suggest the intervention not only boosted spelling skills but also reduced differences in proficiency across the group, offering insight into the uniformity of improvement (Field, 2013).

Complementing the quantitative findings, qualitative insights were gathered through in-depth interviews to explore students' perceptions and experiences. The interview data underwent a thorough qualitative analysis process, which involved coding the transcripts to identify recurring patterns, reducing data to focus on the most relevant information, and applying thematic analysis to extract meaningful themes. This approach enabled



the researchers to gain a deeper understanding of the intervention's effectiveness, the perceived benefits from the learners' perspectives, and their suggestions for further improvement. The integration of both quantitative and qualitative analyses provided a comprehensive view of the spelling games Intervention's overall impact.

Ethical Considerations

Adhering to ethical standards in research is crucial as it guides the true objectives of the study, such as the pursuit of knowledge, truth, and the prevention of errors, while also fostering important values like trust, accountability, mutual respect, and fairness in collaborative work. To maintain ethical research practices, this study adhered to the ethical principles outlined in the Belmont Report (2010), which include respecting individuals' autonomy, promoting beneficence and non-maleficence, ensuring justice, obtaining informed consent, safeguarding confidentiality and data protection, maintaining integrity, and addressing conflicts of interest.

RESULTS AND DISCUSSIONS

This chapter presents the findings gathered from the study. It includes data on students' level of spelling proficiency performance as measured in the pre-test, their performance in the post-test, and the statistical significance of the differences between the pre-test and post-test scores.

Research Objective No.1: What is the level of spelling ability among grade 6 students before the implementation of the spelling games intervention?

In addressing the first objective, the study made use of the Barnell-Loft Diagnostic Achievement Test (BLDAT) to measure students' spelling proficiency before the Spelling Games intervention was implemented. Five test indicators were chosen by the researchers, as they matched the appropriate difficulty level for Grade 6 learners. These indicators focused on Syllable Count words, Silent Consonants words, Spelling Demons, Contraction words, and Final "y" words. Each indicator comprises of five items a total of 25 items overall. The students' average scores prior to the intervention are shown in Table 1.

The pretest results reflect the spelling proficiency levels of the 42 sixth-grade students in the experimental group. The group recorded an overall mean score of 11.0, with a standard deviation of 5.82, indicating a generally low level of spelling ability before the intervention and notable variability in performance. The highest score achieved was 24 by one student, representing 2.4 percent of the group. Similarly, the lowest score was 1, also obtained by one student, accounting for 2.4 percent of the total. The most common scores were 5 and 8, each recorded by five students, comprising 11.9 percent of the group respectively. These outcomes indicate significant variability in student performance, with a clustering of scores around the mode. The mean percentage score of 43.81% further emphasizes the students' limited spelling proficiency at the pretest stage. Additionally, Table 3 displays the mean scores and their corresponding descriptions for the identified spelling proficiency indicators based on the Barnell-Loft Diagnostic Achievement Test. These findings offer a more detailed perspective on the specific areas where students showed strengths and weaknesses in their spelling abilities.

Table 1. Mean Average of the Scores in Pre-test

Score	Frequency	Percentage
1	1	2.4%
2	2	4.8%
5	5	11.9%
6	2	4.8%
7	3	7.1%
8	5	11.9%
9	4	9.5%
10	1	2.4%
11	2	4.8%
12	2	4.8%
13	1	2.4%
14	1	2.4%
15	2	4.8%
16	1	2.4%
17	3	7.1%
18	1	2.4%
19	2	4.8%
20	2	4.8%
21	1	2.4%
24	1	2.4%
Total	42	100%
Overall Mean		11.0
Mean Percentage Score		43.81%
Description		Very Low
Standard deviation		5.82



The table presents the average percentage scores for various spelling proficiency indicators, which are categorized as "Low" and "Very Low." The average percentage score for syllable count words was 55.24 percent, revealing that students faced notable difficulties in this area. Silent consonant words showed an even lower average of 27.6 percent, indicating persistent challenges and weak performance. Spelling demons had an average score of 31.90 percent, further emphasizing the students' limited skills and significant struggles. Contraction

words averaged 48.57 percent, pointing to a low level of understanding.

Meanwhile, final "y" words had an average score of 60.0 percent, also reflecting considerable difficulty. Overall, Grade 6 students achieved an average spelling proficiency score of just 43.81 percent before the introduction of the spelling games intervention, highlighting a generally poor level of spelling ability.

Table 2. Summary Table on the Average Percentage Scores and Descriptions for Spelling Proficiency Indicators before the Implementation of the Spelling Games Intervention

Indicators	Average Percentage Score	Description
Syllable Count Words	55.24	Low
Silent Consonants Words	27.62	Very Low
Spelling Demons	31.90	Very Low
Contraction Words	48.57	Very Low
Final "y" Words	60.0	Low
Overall Percentage Score (%)	43.81%	Very Low

The results align with previous research by Smith et al. (2021), which found that phonological errors are prevalent among Grade 6 students, primarily due to an overdependence on phonetic spelling strategies. This consistency underscores the persistent nature of such errors and highlights the need for targeted interventions to address them effectively. The findings of the current study further validate these concerns, emphasizing the importance of incorporating instructional methods that go beyond phonetic approaches.

In a similar vein, Jones and White (2022) highlighted the prevalence of morphological errors, underscoring the importance of explicit instruction in word formation and the correct use of affixes. Their research also noted a significant occurrence of orthographic errors, particularly those involving irregular spelling patterns that are characteristic of the English language. These findings collectively point to a pressing need for more targeted and comprehensive approaches to spelling instruction.

Additionally, Fitria (2020) carried out a study that explored spelling mistakes in students' written work and identified four main categories: omission, substitution, insertion/addition, and transposition. Omission errors, which occur when required letters are left out, were the most prevalent, making up 40% of the errors and having a notable impact on readability and understanding. Substitution errors, where incorrect letters are used in place of correct ones, accounted for 28%, reflecting difficulties with phonetic or orthographic knowledge. Insertion or addition errors, involving the inclusion of extra, unnecessary letters, comprised 20% and were often linked to the overapplication of spelling rules. Transposition errors, where letters are arranged in the wrong order, were the least frequent at 12%, suggesting minor issues with processing letter sequences.

Furthermore, some spelling difficulties arise from a lack of understanding of the fundamental rules of writing, listening, reading, and speaking in English. This gap in knowledge can make it more difficult for learners to achieve proficiency in spelling. Therefore, addressing these gaps and providing targeted instruction on the essential language rules can significantly enhance spelling skills in learners.

Research Objective No.2: What is the level of spelling ability among grade 6 students after the implementation of the spelling games intervention?

To address the second objective, the researcher administered a post-test adapted from the Barnel-Loft Diagnostic Achievement Test (BLDAT). Table 3 presents the average scores of the students following the implementation of the Spelling Games intervention.

The post-test outcomes demonstrate the spelling proficiency of the 42 sixth-grade students in the experimental group after the intervention was applied. The group obtained an overall mean score of 22.5, with a standard deviation of 2.40, reflecting a strong level of spelling ability and a tighter clustering of scores compared to the pretest. The highest score was 25, achieved by thirteen students, which accounts for 31.0 percent of the group. The lowest score, 17, was recorded by a single student, representing 2.4 percent of the total. The score that appeared most frequently was also 25, attained by thirteen students, making up 31.0 percent of the group. These results reveal varying performance levels among the students, with a significant concentration at the mode. The mean percentage score of 89.90 percent further supports the improvement in spelling skills, indicating a high level of performance following the intervention.



Table 3. Mean Average of the Scores in Post-test

Score	Frequency	Percentage
17	1	2.4%
18	2	4.8%
19	4	9.5%
20	3	7.1%
21	2	4.8%
22	7	16.7%
23	6	14.3%
24	4	9.5%
25	13	31.0%
Total	42	100%
Overall Mean		22.5
Mean Percentage Score		89.90%
Description		High
Standard deviation		2.40

The table shows the average percentage scores across different indicators of spelling proficiency, all of which fall within the "High" to "Very High" categories. For syllable count words, the average score is 92.86 percent, reflecting a significant improvement in students' spelling skills in this area. Silent consonant words have an average score of 83.81 percent, indicating strong performance following the intervention. Spelling demons recorded an average of 76.67 percent, showing

a noticeable enhancement in proficiency. Contraction words achieved an average score of 97.14 percent, demonstrating a very high level of student mastery. The highest score, 98.57 percent, was in final "y" words, also indicating a very high level of competence. Overall, the Grade 6 students attained a high spelling proficiency score of 89.90 percent after participating in the spelling games intervention, confirming a marked improvement to a high level of spelling ability.

Table 4. Summary Table on the Average Percentage Scores and Descriptions for Spelling Proficiency Indicators after the Implementation of the Spelling Games Intervention

Indicators	Average Percentage Score	Description
Syllable Count Words	92.86	Very High
Silent Consonants Words	83.81	High
Spelling Demons	76.67	High
Contraction Words	97.14	Very High
Final "y" Words	98.57	Very High
Overall Percentage Score (%)	89.90%	High

This is supported by Zorzi (2020) which stated that students enjoy learning spelling through games, as these activities significantly boost their interest and engagement. The interactive elements of games promote collaboration, enabling students to work well in groups. This method makes learning more enjoyable while encouraging active participation and better retention of spelling concepts, enhancing students' spelling skills, making it a highly effective approach for improving spelling proficiency.

Moreover, a study conducted by Regina et.al, (2022) demonstrated that the use of spelling games had a substantial positive effect on students, greatly enhancing their spelling abilities. The intervention made a remarkable difference in the students' spelling skills, highlighting the effectiveness of

incorporating games into the learning process. It was further recommended that teachers be encouraged to adopt a variety of games and teaching strategies to make spelling lessons more interactive and engaging. By doing so, teachers can create a more dynamic and enjoyable learning environment, ultimately leading to improved student performance in spelling. The significant impact of spelling games is clear in fostering both interest and proficiency in students.

Furthermore, this is also in accordance to the study of Lara et.al, (2025) which support the integration of tailored, audio-visual game-based tools to enhance spelling proficiency effectively. The findings of their study highlight the effectiveness of well-designed, localized game-based interventions in not only boosting spelling accuracy but also promoting more uniform



learning outcomes among students. Audio-visual, game-based tools have proven effective in enhancing spelling abilities, with tailored or customized versions potentially leading to even greater improvements.

Research Objective No.3: Is there a significant difference between the pre-test and post-test scores of the pre-experimental group?

Table 5. Significant Difference Between the Pre-test and Post-test Scores

Type of Test	N	df	Mean	SD	t-value	P-value	Cohen's d	Decision $\alpha=0.05$
Pre-Test	42	41	11.0	5.82	18.3	<.001	2.82	Significant
Post-Test	42		22.5	2.40				

The t-test for dependent samples was employed to compare the pre-test and post-test scores, $t(41) = 18.3$, $p < .001$. Given that the p-value is significantly lower than the alpha level ($\alpha = 0.05$), we reject the null hypothesis, which states that there is no difference between the pre-test and post-test scores. The effect size, measured by Cohen's $d = 2.82$, indicates a meaningful improvement in learners' spelling ability. The statistical results demonstrate a significant difference between the two sets of scores. This notable improvement following the intervention suggests that the spelling games had a positive impact on students' spelling abilities. The increase in average scores, along with the high t-value and very low p-value, provides strong support for the intervention's effectiveness.

These findings are aligned with Mathis (2023) which found that the interactive and repetitive nature of spelling games provides effective reinforcement of spelling patterns, leading to better retention. Wedhanti et al. (2021) also found that students in the game-based learning group were more enthusiastic, confident, and actively involved in classroom activities. Students who learned vocabulary through spelling bee games outperformed those who used traditional flashcards. In a more recent study,

In order to answer this research question, which examines the significance of the spelling games intervention, statistical analysis was conducted on the pre-test and post-test scores. This analysis aimed to determine whether the observed changes in students spelling ability were statistically significant and attributable to the intervention.

Scheiter et.al, (2023) revealed that children who received spelling game intervention showed significantly greater improvements in both spelling accuracy and underlying phonological awareness contributing to improved performance in spelling.

Research Objective No.4: What insights can be drawn from the implementation of spelling games intervention regarding their effectiveness in enhancing students spelling abilities?

To answer this question, in-depth interviews were conducted with the participants. Probing questions were asked to elicit their response regarding their experiences with the impact of the Spelling games intervention in improving spelling proficiency among grade 6 students. The major themes and sample statement for research question number 4 are presented in Table 5. Participants shared their responses about their own experiences and observation of the intervention. From the answers of the participants, four major themes emerged: (1) awareness on the importance of spelling; (2) fun-filled learning experience; and (3) extended practice through play spelling; and (4) building confidence in spelling.

Table 5. Themes And Sample Statements on What Insights Can Be Drawn from The Implementation of Spelling Games Intervention Regarding Their Effectiveness in Enhancing Students Spelling Abilities.

Emerging Themes	Sample Statements
Awareness on the Importance of Spelling	<ul style="list-style-type: none"> ✓ "It was shown in the games, ma'am, that spelling is important because we can use it in writing and reading, I became good at spelling because it's easy to remember the words when we play games." (IDI-01) ✓ "The spelling games, ma'am, made me understand better that spelling is really important. Before, it was like I didn't know how important correct spelling of words is. Because of the spelling games, I learned that if the spelling is correct, the writing is easier to understand or the message is clearer. I practiced often and improved my spelling skills." (IDI-02) ✓ "The spelling games helped because I understood that spelling is important so that what I write can be understood. Before, I didn't care, but now I know that if the spelling is wrong, the meaning is also wrong." (IDI-04)
Fun-filled Learning Experience	<ul style="list-style-type: none"> ✓ "I like games, that's why I also enjoy learning. Spelling becomes fun when it's through games. I feel happy and excited to learn new words." (IDI-01) ✓ "I enjoyed learning spelling more because of the games. Before, spelling felt tiring and boring to me, but now it feels



	<p>like just playing. I always get excited during the intervention sessions, ma'am, because I know I'll have fun while learning" (IDI-02)</p> <p>✓ "I had more fun because there were games. Spelling is no longer boring. I always want to join because it feels like a challenge, but it's fun". (IDI-04)</p>
Extended Practice Through Play Spelling	<p>✓ "Because of the spelling games, ma'am, I realized that practicing spelling can actually be fun. Now, I make my own games at home, like timing myself to see how many correct spellings I can write. I don't avoid spelling anymore because I know it can be enjoyable." (IDI-02)</p> <p>✓ "Before, I didn't really practice spelling at home, but now my sibling or mom and I play spelling games together. I enjoy practicing more because it still feels like playing." (IDI-05)</p> <p>✓ "Now, I practice spelling even at home. I make flashcards or play spelling bee with my sibling. I don't just look at the book all the time anymore, because I've learned there are other ways to study." (IDI-07)</p>
Building Confidence in Spelling	<p>✓ "Sometimes, some words are hard, but the games helped me. Now, I'm more confident and I'm not afraid of spelling tests because I know more now." (IDI-01)</p> <p>✓ "This really helped a lot because before, I felt shy when I got the spelling wrong. But in the games, I wasn't scared to make mistakes since it felt like just practice—and I even had fun. It helped boost my confidence because I realized I could actually do it if I just kept practicing." (IDI-02)</p> <p>✓ "Before, I was scared of spelling tests because I might get it wrong. But because of the games, I got to practice and my confidence improved. I'm not that shy anymore when I make mistakes because I know it's part of learning." (IDI-03)</p>
Increase Engagement Through Game Variety and Incentives	<p>✓ "Maybe it would be better if there were more kinds of games so it doesn't keep repeating." (IDI-03)</p> <p>✓ "To make the spelling games better, maybe add more types of games like spelling bingo. There could also be rewards so kids would enjoy more. And it's better if there are team games so we can help each other too." (IDI-06)</p> <p>✓ "It would be better if more types of games are included, like matching games. And hopefully, more rewards can be added so we become more motivated." (IDI-07)</p>

In this study, it was found that the spelling games intervention was effective in terms of improving the spelling proficiency of the six-grade students. One of the emerging themes was awareness on the importance of spelling. Nga (2020) supported this study by stating that games aren't just for entertainment, they're actually a practical tool for reinforcing and reviewing language lessons, which helps learners build stronger communication skills. In addition, in a certain study revealed that students engaged in spelling games demonstrated marked improvements, underscoring the powerful role of interactive and game-based learning methods in enhancing spelling accuracy and overall language proficiency. This highlights how incorporating spelling games can effectively transform traditional learning, making it more engaging and impactful for students. Changkakoti, et al. (2021)

Another theme that emerged was fun-filled learning experience. The spelling games captured the engagement and motivation of

the learners upon learning spelling. This is supported by El-Komi (2021) which stated that game-based learning has been shown to improve pupils' vocabulary and spelling skills. Incorporating games into lessons boosts motivation by making spelling practice enjoyable and engaging, fostering a positive and relaxed learning environment. This is also supported by Mendoza (2020), which claims that this approach aims to make the learning environment stimulating and supportive, fostering learners' confidence, encouragement, and motivation. As such, this study tested the effectiveness of the strategy in teaching spelling involving six- grade learners.

Moreover, another theme that emerged was extended practice through play spelling. When pupils learn through games, it enables pupils to be responsible for their own learning even outside the classroom. This was supported by the study of Shalaby (2020) which revealed that engaging in spelling practice can lead to improved spelling accuracy, better self-



regulation, and increased involvement in spelling tasks. By prompting students to actively monitor and evaluate their own behaviors, the approach likely highlighted the importance of metacognitive strategies in boosting academic performance. Consequently, a study conducted by Smith, et. al (2022) shows that students who practice spelling games at home improve their spelling skills significantly. The flexibility and interactive nature of home practice encourage consistent learning, leading to stronger, long-lasting spelling abilities. This highlights how crucial practicing spelling at home is for real progress

Additionally, the intervention was found to boost students' confidence, lessening their fear of making mistakes and creating a more supportive learning environment that encourages communication. This finding aligns with the study of Montes and Jarpa (2023), which emphasized that interventions need to be meaningful and engaging to build students' confidence and foster an enriching learning atmosphere. Furthermore, a study of Sigurðardóttir (2021) explains why using games in the classroom can be really valuable. When students enjoy the learning process, they become more engaged. This active participation is essential, as true learning happens when students are involved. Enjoyable activities not only improve focus but also help boost students' confidence as they succeed and interact with others.

Finally, the fifth theme, increase engagement through game variety and incentives highlighted how the learners suggested that incorporating a wider range of games, along with opportunities for teamwork, can significantly boost their interest and enthusiasm in learning spelling. Similarly, Qamariah and Wahyun (2021) revealed learners enjoy spelling courses more when spelling games are utilized, especially when these games include incentives or rewards, which further motivate students to participate and perform well. In addition, according to Tuan (2023), educational games not only create a fun learning environment but also promote active participation and sustained motivation among students.

CONCLUSION

Based on the results of the study, it concludes that the use of Spelling Games Intervention had a meaningful and positive effect on the spelling proficiency among Grade 6 students. Before the intervention, the students displayed very low spelling skills, with pre-test scores ranging from 1 to 24 and an overall mean of 11.0. They particularly struggled with silent consonant words, spelling demons, and contraction words.

After the implementation of the spelling games, there was a significant improvement in their spelling abilities. Post-test scores ranged from 17 to 25, with an overall mean of 22.5, indicating high proficiency. The students showed substantial growth in all previously difficult areas, achieving 'High' mean scores in silent consonant words, spelling demons, and 'Very High' mean scores in contraction words. A paired t-test statistical analysis revealed a significant difference between the pre-test and post-test scores $t(41) = 18.3, p < 0.001$, emphasizing the effectiveness of the spelling games in improving spelling proficiency.

The significant improvement in spelling scores after the strategy was implemented highlights its effectiveness in addressing specific challenges such as silent consonant words, spelling demons, and contraction words. The approach not only helped students recognize word patterns but also boosted their self-confidence, spelling retention, and overall accuracy. Teachers are encouraged to include spelling games in their teaching methods to create a more engaging and effective environment for spelling development.

Qualitative insights from in-depth interviews further reinforced these results, showing that students enhanced perception of the importance of spelling, increased engagement and motivation, improved spelling practice habits outside the classroom, and boost in confidence and reduced fear of mistakes. Students recognized the effectiveness of the spelling games in improving their spelling abilities, highlighting its practical application and the enjoyable learning opportunities it provided. Based on the study's findings, it is recommended that educators consider incorporating spelling games to enhance spelling proficiency among Grade 6 students.

RECOMMENDATION

Considering the research findings, all the spelling strategies used were found to be effective. These strategies can help improve elementary students' spelling skills. The researchers saw improvements in students' spelling through developmental pre-test and post-tests. We recommend that strong spelling instruction should not only include direct teaching but also be connected to reading and writing activities. When spelling is part of the whole curriculum, students are more likely to apply what they learn. We strongly recommend that teachers should incorporate spelling games into daily instruction. Games like word mapping, build with blocks, flower power, tic-tac-toe, spin it spell it, and Boggle game. This not only improved spelling proficiency but also boosted student motivation and confidence. The data from the study show that using fun and engaging activities like these helped students improve their spelling ability. When these strategies were used across different subjects, students used their spelling words more often. Other teachers can use these same strategies in their own classrooms to help their students become better spellers.

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