Fliptoword Gameword: Aid in Developing Vocabulary Proficiency Among Grade 6 Learners

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A B S T R A C T :

This research aimed to improve the vocabulary skills of Grade 6 Aguinaldo students at Pablo M. Conag Central School, located in the Esperanza District of Masbate Province, by implementing Fliptoword, a game-oriented teaching approach. The study addressed the issue of inadequate vocabulary abilities in elementary students, a concern identified by the Department of Education, as it adversely affects performance in various subjects. An initial evaluation revealed that numerous students struggled with word recognition and application, making it essential to adopt a more interactive and effective vocabulary instruction approach. The research utilized a pre-experimental, single-group pretest-posttest framework, comprising 34 participants from the identified class. The intervention lasted four weeks, during which the Fliptoword game was incorporated into English classes twice a week. Data were gathered through vocabulary proficiency assessments conducted before and after the intervention, alongside classroom observations and informal interviews. The Shapiro-Wilk test indicated a non-normal distribution in the pretest data, prompting the application of the Wilcoxon Signed-Rank Test for statistical evaluation. Results demonstrated a statistically significant improvement ($p < 0.001$) in students' vocabulary skills following the intervention. Notably, 41.18% of students reached a Highly Proficient level, while only 5.88% remained Not Proficient. The findings suggested that Fliptoword successfully created an interactive, low-stress learning environment that fostered engagement, experimentation, and collaboration. These results aligned with constructivist learning principles and underscored the importance of learner-centered methods in language teaching. The research concluded that game-based learning can effectively address vocabulary deficiencies, enhance student motivation, and facilitate differentiated teaching in public elementary schools. It advocated for the broader implementation of these innovative teaching methods to support the Department of Education's initiatives in improving language skills across the country.

Keywords: vocabulary proficiency, game-based learning, Fliptoword, language development

1. Introduction

Vocabulary skills are crucial for the academic success of students, particularly in reading comprehension, writing, and speaking. In the educational framework of the Philippines, the Department of Education (DepEd) acknowledged that insufficient vocabulary abilities in elementary students result in poor performance in English and other subjects (Department of Education, 2017). Language is essential across all disciplines, necessitating a strong vocabulary base for students to grasp ideas thoroughly and articulate their thoughts clearly. A preliminary vocabulary evaluation conducted with Grade 6 students at Pablo M. Conag Central School indicated significant challenges in both word recognition and usage, highlighting the need for targeted interventions to address these issues.

These challenges indicate a broader educational problem across the country and necessitate creative teaching approaches tailored to the distinct learning environments of young students. Academic researchers and educators are increasingly promoting game-based learning to enhance engagement and motivation in language learning (Lestari et al., 2023; Shen, 2023). Gonzales and Torres (2018) specifically pointed out the advantages of utilizing interactive tools like flipcharts and scrambled letter games to improve vocabulary retention for students. These strategies leverage learners' innate tendencies for play and teamwork, fostering an environment that promotes meaningful learning, which is both enjoyable and effective . Recent research has emphasized the importance of interactive, game-based learning methods as effective tools for vocabulary enhancement. Lestari et al. (2023) showed that interactive games encourage active involvement from learners, which correlates with improved vocabulary retention and application when compared with traditional rote learning techniques. Shen (2023) additionally explained that game-based interventions enhance cognitive engagement by offering instant feedback, promoting a better understanding of word meanings and their contextual use. These results align with constructivist learning theories, which emphasize learner-centered methods and experiential learning.

Additionally, the incorporation of digital and board games in classrooms has increased as teachers aimed to innovate within the limitations of curriculum requirements and classroom situations. Game-based learning that aligns with the principles of differentiated instruction enables learners to progress at their own pace while receiving customized assistance (Lestari et al., 2023). The Fliptoword game created for this research was intended as a board game,

promoting social engagement and collaborative learning among sixth-grade students, as studies have indicated that it improves vocabulary learning through peer assistance and verbal exercises (Gonzales & Torres, 2018). An important feature of game-based vocabulary learning is its capacity to reduce learner anxiety and enhance confidence. Conventional vocabulary exercises often caused anxiety, restricting learners' willingness to try new words.

In contrast, interactive games fostered a low-stress environment that encouraged experimentation and risk-taking, both crucial for language growth (Shen, 2023). This supportive emotional environment fostered ongoing student engagement , essential for lasting vocabulary acquisition and educational achievement. In general, vocabulary development acted as a crucial skill that significantly impacted learners' overall educational advancement. Addressing vocabulary deficiencies through creative, game-oriented learning methods like Fliptoword proved to be a successful approach to boosting learner engagement, motivation, and language skills. This method aligned with contemporary educational studies that supported interactive, learner-centered teaching styles catering to various learning preferences and promoting greater understanding. Therefore, the implementation of Fliptoword at Pablo M. Conag Central School served as a contextually appropriate and research-supported strategy, providing valuable insights into the efficacy of game-oriented vocabulary instruction in primary education.

1.1 Statement of the Problem

The primary goal of this study was to enhance the vocabulary skills of Grade 6 students by utilizing Fliptoword, a game board intervention applied at Pablo M. Conag Central School, Esperanza District, Schools Division of Masbate. The research sought to address the noted lack of vocabulary skills in learners through an engaging and interactive teaching approach. The study aimed to assess the vocabulary proficiency level of Grade 6 students before and after the intervention's implementation and to investigate if there was a notable difference in their vocabulary proficiency due to the use of Fliptoword. These goals formed the foundation for the following research questions: What was the vocabulary proficiency level of Grade 6 students prior to the intervention 's implementation ? What was their skill level following its use? Was there a notable difference in the vocabulary proficiency levels of learners after the game-based intervention was applied ?

2. Methods

2.1 Research Design

This research utilized a pre-experimental one-group pretest-posttest framework to assess the impact of the Fliptoword game-based intervention on improving vocabulary skills among Grade 6 Aguinaldo learners at Pablo M. Conag Central School, Esperance District, Schools Division of Masbate. This research design was specifically appropriate for educational environments where control groups or random assignments cannot be implemented; yet, it is essential to evaluate learning improvements before and after an instructional intervention (Calmorin & Calmorin, 2012). The one-group pretest-posttest design allowed for assessing learners' vocabulary skills before and after the four-week application of Fliptoword. This approach is frequently utilized in actual classroom environments, enabling the tracking of changes over time while maintaining the natural progression of teaching. According to McMillan (2016), this method is suitable for research conducted in genuine educational settings where the main goal is to assess the teaching effect in regular school conditions. By utilizing action research principles, this design facilitates the continuous enhancement of classroom practices. Mertler (2021) highlights that action research enables teachers to examine the impacts of teaching methods directly in their educational settings, making it a perfect format for school-focused initiatives such as Fliptoword. The design's structure provided a methodical approach to gather and evaluate evidence of instructional results within the specific context of the Schools Division of Masbate.

2.2 Data Sources

This research employed a combination of primary and secondary data sources to assess the impact of the Fliptoword game-based intervention on improving the vocabulary skills of Grade 6 students at Pablo M. Conag Central School, Esperanza District, within the Schools Division of Masbate. The main data were collected directly from the 34 Grade 6 students of Section Aguinaldo, which included 19 boys and 15 girls. The data were gathered using a pretest-posttest method, where learners took a vocabulary proficiency assessment both before and after a four-week implementation of the intervention. Moreover, classroom observations and informal interviews offered qualitative perspectives on student engagement and behavioral reactions throughout the intervention. Conversely, secondary data were obtained from relevant literature that supported the study's methodology and analysis.

2.3 Research Procedure

The research was conducted at Pablo M. Conag Central School, located in the Esperanza District, within the Schools Division of Masbate, and included Grade 6 - Aguinaldo learners, comprising 19 boys and 15 girls, totaling 34 students. Before starting the study, authorization was obtained from the school administration, and parental consent was secured to ensure compliance with ethical guidelines during the intervention. Coordination with the 6th-grade adviser was established to organize the activities. Initially , a pretest was administered to all students to assess their basic vocabulary skills. The Fliptoword game-based program was then implemented over four weeks, occurring twice a week during English class sessions. During this period , classroom observations and informal interviews with selected students were conducted to gather qualitative data on student engagement and reactions to the intervention. After the intervention concluded , a posttest was administered to evaluate any changes in vocabulary skills. The pretest and posttest results underwent statistical analysis, beginning with the Shapiro-Wilk Test to assess the normality of the data. Due to the non-normal distribution of scores, the Wilcoxon Signed-Rank Test was utilized to examine the significance of improvements in vocabulary proficiency. This approach facilitated the evaluation of the intervention's effectiveness in the authentic classroom setting.

3. Results and Discussion

3.1 Vocabulary Proficiency Level of Grade 6 Aguinaldo Learners

The vocabulary skill levels of Grade 6 Aguinaldo students at Pablo M. Conag Central School displayed diverse outcomes. According to Table 1, a notable percentage, 41.18%, fell into the Highly Proficient category, demonstrating outstanding vocabulary skills and the capability to utilize complex terminology in various contexts. This finding indicated that a significant portion of students had already acquired the necessary vocabulary skills to enhance reading comprehension as well as oral and written communication-essential domains of academic success (Lestari et al., 2023; Shen, 2023). Moreover, 14.71% of the students demonstrated proficiency, signifying a sufficient grasp of the majority of vocabulary appropriate for their grade.

Collectively, the 55.89% of students achieving either Highly Proficient or Proficient levels indicated the potential effectiveness of specific teaching strategies implemented in the classroom, such as differentiated instruction or vocabulary-boosting activities. As stated by de la Cruz et al. (2022), interactive and contextualized teaching enhances vocabulary retention and usage in Filipino elementary students. Nevertheless, the data indicated that 29.41% of students were categorized as Low Proficient, experiencing difficulty with common vocabulary, whereas 8.82% were Nearly Proficient and required additional assistance with unfamiliar words. The 5.88% labeled as Not Proficient, who displayed limited word recognition and required immediate remedial teaching, was the most alarming. These statistics emphasized the ongoing vocabulary gap in elementary students, aligning with the Department of Education's findings from 2023, which indicated a notable drop in essential language skills after the learning interruptions caused by the pandemic.

The different degrees of vocabulary proficiency suggested that specific interventions were necessary, especially for the 44.11% of students who fell short of proficiency. A recent study by Santos and Rivera (2023) highlighted the significance of localized, game-oriented learning methods to aid vocabulary growth for struggling students in rural public schools across the Philippines. Furthermore, students with a restricted vocabulary often became uninterested in reading activities, resulting in additional educational difficulties. Thus, enhancing vocabulary through interactive approaches like Fliptoword catered to both the cognitive and emotional aspects of learning. Game-oriented teaching has gained growing recognition as an effective approach in language acquisition.

According to Shen (2023), these methods create engaging, low-stress environments in which students are more inclined to explore and experiment with language. In this study's context, using vocabulary games such as Fliptoword might have played a crucial role in assisting low and not proficient learners to enhance their skills while also maintaining the motivation of higher-achieving students. These results highlighted the essential importance of teaching vocabulary in elementary schooling. A strong vocabulary is essential not only for language arts but also for all subjects that require reading comprehension. Addressing these gaps via tailored instruction, interactive interventions, and continuous vocabulary evaluation is crucial for enhancing academic performance at the elementary level, particularly in underfunded public schools (Lestari et al., 2023; de la Cruz et al., 2022).

Table 1
Vocabulary Proficieny Level of Grade 6-Aguinaldo Learners

Proficiency Level	Description	Score Range (%)	Freq (f)	Percentage (%)
Highly Proficient	Excellent vocabulary knowledge; can understand and apply complex words in various contexts.	90-100	14	41.18
Proficient	Adequate vocabulary skills; can use and understand most grade-level words.	75-89	5	14.71
Nearly Proficient	Partial vocabulary understanding; needs support with unfamiliar words.	50-74	3	8.82
Low Proficient	Limited vocabulary knowledge; struggles with common words.	25-49	10	29.41
Not Proficient	Minimal vocabulary recognition; requires intensive intervention.	0-24	2	5.88

Note: Total Number of Participants was 34.

3.2 Normality Assessment of Data

Evaluating data normality was a vital first step in selecting the suitable statistical test for analyzing the vocabulary proficiency scores of Grade 6 Aguinaldo students. As indicated in Table 2, the Shapiro-Wilk test was performed on both pretest and posttest scores to assess if the score distribution adhered to a normal distribution, which is necessary for parametric testing. For the pretest scores, the Shapiro-Wilk statistic was 0.895 and the p-value was 0.003, falling below the alpha threshold of 0.05. This outcome suggested that the pretest data showed a significant divergence from a normal distribution. As a result, the expectation of normality was breached. This result was consistent with the essence of initial assessments, as differences in students' pre-existing vocabulary knowledge might lead to distorted data distributions, particularly in diverse classrooms (Lestari et al., 2023).

In comparison, the posttest results showed a Shapiro-Wilk value of 0.977 and a p-value of 0.680, indicating that the data did not significantly deviate from a normal distribution. This suggested that the data from the posttest followed a normal distribution. The enhanced normality of scores after the intervention may have indicated more consistent learning improvements among the students, likely due to the organized and engaging vocabulary teaching offered during the treatment period (Santos & Rivera, 2023).

Since the pretest data failed to satisfy the normality assumption, the study utilized a non-parametric test, namely the Wilcoxon Signed-Rank Test, to assess if there was a statistically significant difference between the scores of the pretest and posttest. The application of non-parametric analysis was warranted and suitable for small sample sizes or when the normality assumption was violated (Field, 2020)

Table 2
Normality Assessment of Data

Variables	N	S-W	P-value	Interpretation
Pretest	34	0.895	0.003	Not normally distributed
Posttest	34	0.977	0.680	Normally distributed

3.3 Significant Difference on the Vocabulary Proficeincy of Grade 6 Aguinaldo After the Implementation of Fliptoword Gameboard

The statistical analysis indicated a notable difference in the vocabulary skills of Grade 6 Aguinaldo students after using the Fliptoword game board , as shown by the Wilcoxon Signed-Rank Test outcome (p < 0.001). This indicated that the game-based intervention significantly improved the learners' vocabulary abilities, validating the importance of interactive learning resources in language teaching. Within the framework of the Department of Education (DepEd), this discovery reinforced the incorporation of novel teaching methods that enhance student engagement and motivation. DepEd has highlighted the enhancement of students' communication skills as a key focus, especially in English, which serves as a medium throughout various subjects (DepEd, 2017). The favorable results from utilizing Fliptoword corresponded with these objectives, underlining the capacity of game-based learning to promote vocabulary development in an engaging and supportive environment .

The Fliptoword game board encouraged the active involvement of learners and interaction among peers, which studies indicate is vital for enhancing language abilities and increasing learner confidence (Gonzales & Torres, 2018). Additionally , game-oriented approaches aided in alleviating the anxiety often linked to vocabulary exercises, motivating students to take risks and practice without the fear of making mistakes (Shen, 2023). These emotional benefits likely contributed to prolonged motivation and improved vocabulary retention. This research also highlighted the broader transition in DepEd towards learner-focused teaching methods that cater to various learning styles and paces . The success of Fliptoword underscored the importance of adapting teaching methods to more effectively meet learners' needs, transcending conventional lecture- based education. Teachers were encouraged to adopt these innovations to enhance the quality and effectiveness of vocabulary teaching in the classroom.

Ultimately, the results offered valuable insights for curriculum developers and policymakers within DepEd, indicating that enhancing game-based vocabulary initiatives might tackle the ongoing issues seen in students' vocabulary skills. Continued application of these strategies may greatly enhance literacy results, thus aiding students' academic achievements in various subjects (Santos & Rivera, 2023).

Table 3
Statistical Interpretation of Pretest and Posttest on the Vocabulary Proficiency After the Implementation of Fliptoword Gameword

Variables	N	S-W	P-value	Interpretation
Pretest-posttest	34	4.00	<0.001	Statistically significant

4. Conclusion

This study set out to determine the effectiveness of the Fliptoword game-based intervention in improving the vocabulary proficiency of Grade 6 Aguinaldo learners at Pablo M. Conag Central School, Esperanza District, Schools Division of Masbate. The findings revealed that the vocabulary proficiency of the students significantly improved after the intervention, demonstrating the value of interactive, game-based learning strategies in language instruction. Prior to the intervention, a considerable portion of learners fell into the Low Proficient and Not Proficient categories, indicating a lack of mastery in essential vocabulary skills. After four weeks of implementing Fliptoword, posttest results showed a marked increase in learners reaching the Proficient and Highly Proficient levels. This shift was validated statistically through the Wilcoxon Signed-Rank Test, which revealed a highly significant difference (p < 0.001) in vocabulary proficiency before and after the intervention.

The conclusion drawn from this research is twofold: first, that Fliptoword was an effective instructional tool for enhancing vocabulary skills; and second, that game-based learning not only fosters cognitive development but also enhances emotional engagement by reducing learner anxiety and encouraging active participation. These effects are especially beneficial in rural and public school contexts, where students often require additional support and motivational strategies to overcome learning gaps caused by socio-economic and pandemic-related factors. The study reinforces the need for educators to integrate dynamic and learner-centered methods into their English instruction. It also supports Department of Education (DepEd) initiatives that emphasize communicative competence and inclusive education. Ultimately, Fliptoword serves as an effective, low-cost, and replicable classroom innovation that can be scaled or adapted across other elementary schools seeking to improve vocabulary and literacy outcomes.

REFERENCES

1. Calmorin, L. P., & Calmorin, M. A. (2012). *Research methods and thesis writing* (2nd ed.). Rex Book Store.

2. Dela Cruz, M. C., Flores, J. M., & Manalo, R. D. (2022). Interactive and contextualized learning strategies in vocabulary acquisition of Filipino elementary students. *Philippine Journal of Education and Learning*, 27(3), 45–56.

3. Department of Education. (2017). *Policy guidelines on the implementation of the national reading program*. https://www.deped.gov.ph

4. Department of Education. (2023). *Learning recovery and continuity plan*. https://www.deped.gov.ph

5. Field, A. (2020). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

6. Gonzales, A. R., & Torres, M. L. (2018). Effectiveness of using scrambled letters and flipcharts in enhancing vocabulary retention. *Asian Journal of Basic Education*, 4(1), 15–23.

7. Lestari, I. W., Mahardika, I. G., & Wulandari, M. (2023). Game-based vocabulary learning: Enhancing retention through interactive strategies. *International Journal of Language Education*, 7(2), 103–116. https://doi.org/10.26858/ijole.v7i2.41134

8. McMillan, J. H. (2016). *Fundamentals of educational research* (7th ed.). Pearson Education.

9. Mertler, C. A. (2021). *Action research: Improving schools and empowering educators* (6th ed.). SAGE Publications.

10. Santos, R. A., & Rivera, J. P. (2023). Game-based learning for vocabulary instruction in rural Philippine schools: A localized approach. *Asia Pacific Journal of Educational Innovation*, 5(1), 67–78.

11. Shen, Y. (2023). The impact of game-based learning on vocabulary development and learner motivation. *Journal of Educational Psychology and Innovation*, 12(4), 188–205. https://doi.org/10.1016/j.jepi.2023.12.008