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PROJECT F.L.I.P.: FOSTERING LANGUAGE INTEGRATION THROUGH PLAY– AN INNOVATIVE GAMIFICATION APPROACH TO ENHANCE FILIPINO VOCABULARY AMONG GRADE 4 ELEMENTARY STUDENTS

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ABSTRACT
This study reviews online gamification as a teaching strategy to enhance Filipino vocabulary acquisition among Grade 4 students at Maniki Central Elementary School SPED Center. The research examines the impact of online gamification on improving Filipino vocabulary acquisition. The study employed a quasi-experimental approach within a quantitative research design. A total of thirty participants were selected as the sample, with seven chosen to share their insights regarding the intervention. Data analysis was carried out through descriptive statistics and paired sample t-tests to determine the effectiveness of the intervention. Results indicated that the average filipino vocabulary scores increased from 39.33% before the intervention to 90.43% after the intervention. Moreover, the paired sample t-test revealed that this improvement was statistically significant, $t(29) = 37.9$, $p < .001$, with a large effect size (Cohen's $d = 6.91$), indicating that the intervention had a substantial impact on students' Filipino vocabulary. These results are consistent with previous findings on gamification in education (Deterding et al., 2011), highlighting its potential to foster learner engagement and improve academic performance. Additionally, Grade 4 students initially showed low performance in Filipino vocabulary, with a pre-test mean score of 11.80. After a seven-week intervention using Project F.L.I.P., the post-test mean increased to 27.23, demonstrating a high level of vocabulary proficiency. The study also found that Project F.L.I.P. enhanced vocabulary by motivating students through game-based learning, reinforcing knowledge with multisensory strategies, promoting interactive engagement, and building learner confidence. Thus, the intervention proved effective and can serve as a great instructional tool.

KEYWORDS: *F.L.I.P Intervention, Filipino Vocabulary, Grade 4 Elementary Students, Quasi-Experimental Design Study, Philippines*

INTRODUCTION

A well-developed vocabulary is a fundamental pillar of language acquisition, particularly for elementary learners. In the Filipino setting, it significantly enhances communication skills, academic performance, and fosters a strong sense of cultural identity (Ranque et al., 2024). An extensive vocabulary equips young students with the ability to comprehend various texts and articulate their thoughts with greater clarity and confidence (Syaifudin et al., 2020). Additionally, gaining proficiency in Filipino vocabulary—alongside English—deepens their connection to their roots, encouraging a sense of pride in their language and heritage (Lamorinas et al., 2024). Their research highlights that Filipino vocabulary supports academic growth, sharpens language skills, and enriches students' cultural understanding and national identity.

Learning the Filipino language presents notable challenges for international students, as seen in various contexts such as Japan, Malaysia, and Namibia. In Japan, students struggle with Filipino grammar and basic communication, prompting educators to integrate cultural immersion with language instruction to foster both linguistic proficiency and cultural appreciation (Sawa, 2023). This holistic approach enhances students' connection to Filipino heritage while supporting their language development. Similarly, in Malaysia, Filipino is gaining visibility in academia and media, yet students at institutions like the University of Malaya face limited access to resources, minimal real-life exposure, and structural differences between Filipino and Malay. Jubilado (2020) stresses the importance of culturally responsive strategies to address these barriers. In Namibia, English-speaking learners encounter persistent difficulties in vocabulary, pronunciation, and grammar due to limited language exposure and cultural disconnects. These studies collectively underscore the need for immersive, culturally relevant, and engaging teaching approaches to support Filipino language acquisition globally.

In the Philippines, students across various regions face persistent challenges in mastering the Filipino language, particularly in areas where English or local dialects dominate daily communication. In the Zamboanga Peninsula, native English-speaking learners struggle with Filipino due to

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linguistic differences and limited exposure, highlighting the need for targeted interventions. Similarly, in Negros Occidental, pupils at Central Philippine Adventist College Elementary School experience difficulty expressing themselves in Filipino, which hampers comprehension and academic performance (Amarilla et al., 2020). Limited use of Filipino at home and reliance on the mother tongue further exacerbate the issue. In Koronadal City, Hermonio (2025) found that Grade 8 students demonstrated low Filipino vocabulary proficiency due to outdated, memorization-based teaching methods that lack real-life context. These widespread challenges underscore the urgent need for immersive, context-based, and student-centered Filipino language strategies to promote fluency, improve academic outcomes, and foster deeper cultural connection among learners.

In the Division of Davao del Norte, particularly at Maniki Central Elementary School, Grade 4 students face significant challenges in understanding and using Filipino vocabulary effectively. Many demonstrate greater proficiency in English, revealing a clear disparity between their skills in the two languages. This gap becomes more evident during examinations that require interpreting and answering in Filipino. Contributing factors include the prevalent use of English as the medium of instruction, limited Filipino instructional materials, and minimal exposure to the language at home and in daily interactions. These challenges hinder vocabulary development and affect academic performance. Therefore, conducting action research is essential to identify the root causes of students' Filipino vocabulary difficulties and to develop targeted, evidence-based interventions that can enhance their vocabulary skills.

This study emerged from the recognition of an existing phenomenon in the educational context. It is essential to enhance students' Filipino vocabulary skills, which play a crucial role in their academic performance. This action research carries significant implications for society, as it provides a foundation for improving learners' Filipino vocabulary, particularly through reading and listening practices. Students are key to determining the quality of education, and understanding the challenges they face in mastering Filipino vocabulary is vital. The findings of this study will offer valuable insights into the difficulties elementary students encounter when dealing with unfamiliar words and struggling with comprehension in the Filipino language.

An action research study focused on enhancing the Filipino vocabulary skills of grade four students is a critical and timely area that warrants immediate attention. Presently, these challenges are prevalent across various elementary levels, significantly hindering students' ability to grasp the language. The ongoing struggles with Filipino vocabulary lead to detrimental consequences, particularly impacting overall academic performance. Therefore, this action research is essential, as it directly addresses a socially significant issue. The study's goal is to close the existing gaps by introducing targeted interventions, innovative strategies, and effective solutions to assist students in overcoming difficulties with the Filipino language, ultimately improving their comprehension and language proficiency.

In connection with national research, a substantial body of literature is relevant to this study. For instance, Tayzon and Padilla (2023), in their research titled *"Direct and Indirect Teaching of Filipino Vocabulary in the Context of Read-Aloud and Guided Reading Among Students,"* focused primarily on the effects of direct and indirect vocabulary instruction in Filipino using read-aloud and guided reading strategies among Grade 3 students. Similarly, the study by Magno et al. (2024), *"Alternative Teaching Strategies in Learning Filipino Language Among Dominant English Speakers,"* explored innovative teaching methods and their impact on the motivation of students who predominantly use English at home. The findings emphasized that alternative strategies employed by grade school teachers played a crucial role in enhancing students' interest and engagement in learning the Filipino language. This research highlights a significant gap, which presents an opportunity for targeted studies like Project F.L.I.P. This initiative primarily focuses on leveraging online gamification and play-based learning to improve students' vocabulary proficiency in the Filipino language. By incorporating interactive elements, Project F.L.I.P. aims to help students acquire new words, understand their meanings, and apply them effectively in context.

Research Questions

The following research questions aimed to explore effective strategies for enhancing fluency in Filipino vocabulary abilities of Grade 4 students. This study utilized the F.L.I.P framework as an intervention to address the identified challenges. Specifically, it sought to answer the following questions:

1. What is the level of students' Filipino vocabulary ability before the implementation of the F.L.I.P intervention in Grade 4?
2. What was the level of students' Filipino vocabulary ability after the F.L.I.P intervention was implemented in Grade 4?
3. Is there a significant difference of the F.L.I.P intervention on improving the Filipino vocabulary ability of Grade 4 learners?
4. What insights do grade 4 students share regarding the implementation of the F.L.I.P intervention regarding its effectiveness in enhancing students' Filipino vocabulary?

Proposed Intervention/Action Plan

The F.L.I.P. intervention is an 8-week literacy development program aimed at gradually enhancing students' Filipino vocabulary. Structured into four progressive phases, each stage intentionally builds upon the previous one, ensuring a strong and lasting foundation for vocabulary improvement.

In Weeks 1 and 2, the intervention begins by developing students' ability to identify and understand the meaning of Filipino words. During this introductory stage, learners engage with commonly used vocabulary through fun activities like Word Match Mania and Memory Game Card. These early

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sessions aim to sharpen comprehension and foster confidence in recognizing Filipino terms.

As the program progresses into Weeks 3 and 4, the focus shifts toward identifying synonyms and antonyms through interactive tasks such as Synonym and Antonym Challenges. This phase not only strengthens word associations but also widens Filipino vocabulary, supporting improved comprehension and clearer expression.

Building on that, Weeks 5 and 6 introduce new interactive vocabulary games to deepen understanding of Filipino words. Students engage in matching definitions and contextual meanings to appropriate terms, boosting recognition, comprehension, and critical thinking. This active approach helps solidify vocabulary knowledge through consistent, enjoyable practice.

Finally, in Week 7, learners receive guided support to further expand their Filipino vocabulary through the "Word Definition Match" activity. By connecting unfamiliar words to their meanings, students develop a deeper grasp of vocabulary, enhanced memory retention, and increased confidence in applying words in meaningful contexts.

Week 1 & 2	Week 3 & 4	Week 5 & 6	Week 7
Focus: Building vocabulary recognition and understanding through introductory word-identification activities. • Students are introduced to commonly used Filipino words to improve recognition and comprehension. • Activities include "Word Match Mania" and "Memory Game Card," which promote active engagement and word familiarity. • The goal is to build confidence in identifying Filipino words while developing basic vocabulary skills.	Focus: Enhancing vocabulary through recognition of synonyms and antonyms. • Students explore word relationships and expand vocabulary through structured comparison tasks. • Engaging activities like "Synonym and Antonym Challenges" deepen understanding of meaning contrasts. • This phase supports better reading comprehension and more effective word usage.	Focus: Strengthening vocabulary through contextual understanding and definition matching. • Students play vocabulary games that require matching words with definitions or contextual meanings. • Activities promote word recognition, comprehension, and critical thinking skills. • The approach fosters consistent practice and reinforces vocabulary connections in an engaging way.	Focus: Deepening vocabulary mastery through guided and meaningful application. • Learners engage in the "Word Definition Match" activity to link unfamiliar words with accurate meanings. • This guided task supports deeper vocabulary understanding and improves long-term retention. • Students build confidence in using vocabulary meaningfully in both spoken and written contexts.

METHODOLOGY

Research Design

This study employed quantitative research through a one-group pretest-posttest design, a type of pre- experimental approach. This design involves assessing a single group of participants at two distinct points: before (pretest) and after (posttest) the implementation of an intervention. It assessed changes resulting from an intervention or project by comparing values before (baseline) and after the intervention (end-line evaluation). Unlike experimental designs, pre- experimental designs lack a control group for comparison; instead, they focus on changes within a single group over time. The observed differences between baseline and end-line values are attributed to the project, suggesting its impact on the outcomes (Wamunyima & Nyirenda, 2023).

In the context of the study, a quasi-experimental design was employed to evaluate the effectiveness of Project F.L.I.P in enhancing Filipino vocabulary among Grade 4 students. By assessing students' Filipino vocabulary before and after the implementation of Project F.L.I.P, the study aimed to determine whether the intervention produced significant improvements. The design concentrated on tracking progress within the same group of learners, using pretest and posttest outcomes to offer a clear comparison of their Filipino vocabulary skills, thereby linking any notable changes to the intervention. This method allowed for focused observation of learner development in response to the applied strategy. In the context of vocabulary enhancement, this approach proved appropriate, as it enabled the researcher to measure the direct influence of Project F.L.I.P on student performance and vocabulary acquisition, ensuring that observed gains were the result of the implemented instructional framework.

Respondents

The participants in this study were the grade four students from the Maniki Central Elementary School SPED Center who

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demonstrated challenges in filipino vocabulary, particularly in understanding words in filipino. A total of 30 students were purposefully selected based on their pre-test scores to ensure that the intervention would be specifically tailored to meet their individual needs. The primary objective of the intervention was to enhance the students' Filipino vocabulary skills through activities and strategies suited to their current proficiency levels. The researchers deliberately chose grade four learners, recognizing the particular challenges they face with Filipino vocabulary acquisition. The goal of the study was to foster significant improvements in these students' Filipino vocabulary skills. By the end of the study, the students—who initially struggled with Filipino vocabulary at a frustration level—were expected to demonstrate marked progress through the implementation of the Project F.L.I.P. approach**.**

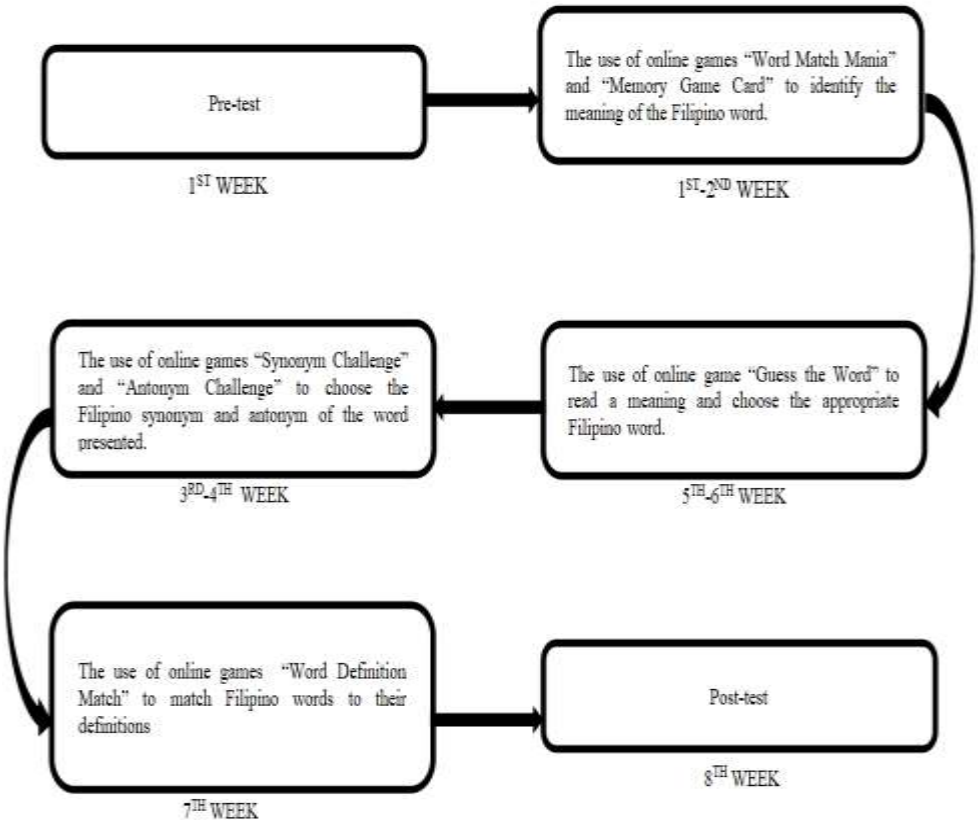
Instrument

The researchers adapted downloadable assessment tools from online sources to evaluate learners' Filipino vocabulary skills both before and after the implementation of Project F.L.I.P. The pre-test instrument is adapted from the Grade 4 modules. The content of the questionnaires is specifically designed for learning filipino vocabulary. The questions assess the ability to select the correct word based on context, ensuring that the chosen answer logically and grammatically fits within the sentence. It consists of a 30-item test. The pre-test will evaluate students' current Filipino vocabulary proficiency, identifying areas where they struggle. Following the intervention, the post-test gauged their progress, offering a direct comparison of performance and highlighted areas of improvement or those still in need of attention.

Procedure

The researchers employed downloadable assessments that were adapted using online gamification/play both before and after the implementation of the intervention to evaluate writing skills. The pretest was used to measure the Filipino vocabulary skill of the grade four learners, while the post-test assessed the improvements in their Filipino vocabulary skill after the intervention. To collect the necessary data, the researchers followed a structured process. First, they sought approval from the principals of the schools where the participants were enrolled. Next, a pre-test was administered to gauge the participants' baseline writing skill levels. Following the pre-test, various quizzes with the use of various online gamification/play were introduced during a eight-week intervention period. At the conclusion of the study, a post-test, using the same set of questionnaires as in the pretest, was administered to measure any improvements in writing skills. The data from both the pretest and post-test were analyzed, collated, and tabulated to assess the effectiveness of the intervention. Presented in Table 1 are the flow of the Procedure from the pretest to the post-test.

Table 1. Flow of the Procedure



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Data Analysis

The data analysis process involved the use of appropriate statistical methods to ensure accurate interpretation and reliable results. Researchers carefully documented the raw scores of students from both the pre-test and post-test to track changes in Filipino vocabulary proficiency. The mean scores were then calculated to assess students' performance before and after the intervention.

In the context of reinforcing the quantitative results, qualitative data were also collected through in-depth interviews that captured students' views and experiences during the intervention. These responses were analyzed using a systematic qualitative approach, which included coding the transcripts to identify common patterns, narrowing the data to highlight the most relevant insights, and employing thematic analysis to uncover key themes.

This comprehensive method provided valuable insight into how the intervention influenced learners, highlighting both its effectiveness and the perceived benefits. Combining both qualitative and quantitative analyses resulted in a holistic evaluation of the overall impact of Project F.L.I.P.

Mean. This refered to the average and was calculated by dividing the sum of a score of the students in pre-test, as well as in post-test. This was used used to determine the level of performance of the students before and after the implementation of the F.L.I.P intervention.

Standard deviation. Is a statistical measure that quantifies the amount of variation or dispersion in a set of values. A low standard deviation indicates that the values tend to be close to the mean of the data set, while a high standard deviation suggests that the values are spread out over a wider range. Standard deviation is commonly used in data analysis to assess the reliability and consistency of results. It is calculated by taking the square root of the variance, which is the average of the squared differences from the mean (Field, 2013).

In the context of this study, standard deviation were utilized to examine the variation in students' Filipino vocabulary skills before and after implementing the F.L.I.P intervention. By computing the standard deviation for both pretest and post-test scores, the research will evaluate the consistency of students' improvements across the sample. A notable decrease in standard deviation from pretest to post-test would indicate that the intervention not only enhanced Filipino vocabulary skills but also minimized the differences in proficiency levels among students. This statistical measure will help gauge the extent of the F.L.I.P framework's impact, offering insight into how uniformly the improvement is distributed within the group.

Paired T-Test. Also known as a dependent or correlated t-test, is an effective analytical method used to evaluate the difference in means and standard deviations between two related groups (Gleichmann, 2020). This statistical test is particularly useful for studies where the relationship between two data sets is crucial, such as pre-test and post-test scenarios.

In the context of this study, the paired t-test was applied to determine if there is a statistically significant difference between the average scores of the pre-test and post-test. This will allow the researchers to assess whether the changes in mean scores were significantly or merely due to random variation. By comparing pre-test and post-test data, the paired t-test proved to be an essential tool for identifying and measuring any changes or progress resulting from the research intervention.

Cohen's d. Is a statistical measure used to determine the effect size between two groups, often in experimental or pre-experimental designs. It quantifies the difference between the means of two groups in terms of standard deviation units, providing a standardized measure of the magnitude of an intervention's effect (Cohen, 1988).

In the context of this study, Cohen's d was used to assess the effectiveness of the F.L.I.P intervention on Grade 4 learners' Filipino vocabulary abilities. By calculating the effect size between students' pretest and post-test scores, the study will determine not only if there is a statistically significant improvement in the Filipino vocabulary skills but also how meaningful the change is in practical terms.

Ethical Considerations

Adhering to ethical standards in research is fundamental to ensuring the integrity of the study. Central to this approach are the principles of pursuing knowledge, truth, and minimizing errors, while fostering values essential for collaborative work, such as trust, accountability, mutual respect, and fairness. To uphold ethical practices, this study followed the research ethics outlined in the Belmont Report (2010). These ethical principles include respect for participants' autonomy, beneficence and non-maleficence, justice, informed consent, confidentiality, data protection, integrity, and the management of potential conflicts of interest.

RESULTS AND DISCUSSION

This chapter presents the summary of the findings about the results of Project F.L.I.P. (Fostering Language Integration through Play) as a practice for enhancing the Filipino vocabulary skills among Grade 4 pupils of Maniki Central Elementary School Sped Center. Analysis and interpretations of data were done parallel to the research objectives.

Research Question No. 1: What is the level of students' Filipino vocabulary ability before the implementation of the F.L.I.P intervention in Grade 4?

Presented in Table 2 is the summary of pretest scores, reflecting the performance of 30 students from the experimental group on a Filipino vocabulary assessment. The group obtained an overall mean score of 11.80 with a standard deviation of 2.77 and an average percentage score of 39.33%, reflecting a very low level of proficiency in the subject matter. The score distribution shows some variation in the students' performance, with one student achieving the highest score of 18, representing 3.33% of the total sample. Conversely, the lowest score of 6 was also recorded by a single student, accounting for 3.33% of the group.

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Table 2. Mean Average of the Score in Pretest

Pre Test Score	Frequency	Percent
6	1	3.3%
7	2	6.7%
9	1	3.3%
10	6	20.0%
11	4	13.3%
12	5	16.7%
13	3	10.0%
14	3	10.0%
15	2	6.7%
16	2	6.7%
18	1	3.3%
Total	**30**	**100%**
Overall Mean		**11.80**
Average Percentage Score (%)		**39.33%**
Standard Deviation		**2.77**
Description		**Very Low**

The most frequent score, 10, was achieved by six students, making up 20.00% of the sample. Scores ranging from 11 to 16 were distributed among other learners, though no specific score group was overwhelmingly dominant. With four students earning scores of 11 (13.33%), five students scoring 12 (16.67%), and three students each obtaining scores of 13, 14, and 15 (10.00% each), we observe that most students' scores are grouped in the middle of the scale.

The results suggest a broad distribution of performance, but the concentration of students at the lower to mid-range of the score spectrum points to the need for targeted intervention. These figures underscore the necessity for reinforcing foundational Filipino vocabulary knowledge among the students.

Nava (2020) identified several factors affecting Filipino vocabulary learning among Grade 4 students, including parental education, family income, and household size. These socio-economic conditions reduce exposure to rich language environments. Additionally, limited access to reading materials, minimal parental support, and lack of enrichment opportunities outside school further hinder students' vocabulary growth and overall language development.

Additionally, Yunus et al. (2020) found that elementary learners struggle with acquiring and retaining vocabulary due to traditional teaching methods focused on memorization and repetition. These approaches often fail to engage students or promote meaningful learning. As a result, learners have difficulty applying new words in context, highlighting the need for more innovative, interactive strategies to improve vocabulary development.

Reyes et al. (2023) noted that students from English-speaking homes often lack regular exposure to Filipino, leading to weaker vocabulary skills. This language imbalance hinders their ability to understand and use Filipino effectively, affecting both language proficiency and academic performance in Filipino-related subjects due to limited practice and reinforcement.

Research Question No. 2: What was the level of students' Filipino vocabulary ability after the F.L.I.P intervention was implemented in Grade 4?

Table 3 shows the distribution of post-test scores of 30 students, revealing their performance after the intervention. The data illustrates a generally strong performance among the participants, with scores ranging from 25 to 30. The most frequently obtained score was 28, achieved by eight students (26.7%), followed closely by a score of 27, which was attained by seven students (23.3%). Both scores are above the calculated overall mean of 27.23, with a standard deviation of 1.41. This indicates that a substantial number of students performed better than the average, reflecting the effectiveness of the instructional strategy used.

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

Post Test Score	Frequency	Percent
25	5	16.7%
26	5	16.7%
27	7	23.3%
28	8	26.7%
29	4	13.3%
30	1	3.3%
Total	**30**	**100%**
Overall Mean		**27.23**
Average Percentage Score (%)		**90.43%**
Standard Deviation		**1.41**
Description		**Very High**

In the lower range, five students (16.7%) scored 25, and another five (16.7%) scored 26. These results, though lower than the mean, still reflect relatively high levels of achievement, especially when viewed against the maximum possible score. Four students (13.3%) scored 29, showing near-perfect performance, while only one student (3.3%) achieved the top score of 30. This single instance of a perfect score, although rare, demonstrates that exceptional achievement was possible under the conditions of the assessment.

The calculated average percentage score of 90.43% classifies the group's performance under the "Very High" description category. This high achievement level suggests that the learning objectives were not only met but surpassed by the majority of students. The results imply a strong mastery of the post-test material, suggesting that the educational intervention or instructional approach was highly effective in improving students' academic performance.

Taken together, these results indicate that students not only improved but achieved at a consistently high level. The narrow range of scores, all clustering in the upper quartile, demonstrates a positive learning outcome and a shared competence across the group in the skills assessed. The high mean and percentage score point to a well-implemented strategy that yielded measurable academic gains.

This finding is consistent with the research conducted by Molina et al. (2020), which highlighted the beneficial impact of gamified activities on students' vocabulary retention and acquisition. Their study underscores the effectiveness of gamification as a tool for enhancing vocabulary proficiency, showing that interactive and engaging methods like games can significantly aid in reinforcing new words and concepts. This approach not only supports the retention of vocabulary but also helps students make connections between words and their meanings in a fun and memorable way.

Moreover, Erraez et al. (2025) emphasized that gamification significantly enhances language learning by creating an engaging and dynamic environment. Integrating game-like elements into vocabulary instruction boosts student motivation and participation. This approach not only makes learning enjoyable but also fosters deeper language retention, suggesting that gamification is a powerful and transformative tool for vocabulary development.

Additionally, Jaiswal (2024) found that gamification enhances vocabulary learning by making it interactive and enjoyable. Unlike passive memorization, gamified tasks—such as rewards and challenges—boost motivation and cognitive engagement. These features help students retain and apply new words more effectively, making gamification a promising strategy for improving both vocabulary acquisition and learner involvement.

In conclusion, the study confirms that Project F.L.I.P. significantly improved Filipino vocabulary skills. Integrating engaging, targeted strategies like gamified learning enhances vocabulary retention and language proficiency. These findings support the value of combining effective instruction with interactive methods to achieve lasting improvements in elementary students' language development.

Research Question No. 3: Is there a significant difference of the F.L.I.P intervention on improving the Filipino vocabulary ability of Grade 4 learners?

This chapter presents the summary of the findings about the results of enhancing grade 4 students' filipino vocabulary using project F.L.I.P for filipino vocabulary activities in Maniki Central Elementary School. Analysis and interpretations of data were done parallel to the research objectives.

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Table 4. Significant Difference between the Pretest and Post-test Scores.

Type of Test	N	df	Mean	SD	t-value	P-value	Cohen's d	Decision a=0.05
Pre-Test	30	29.0	11.80	2.77	37.9	<.001	6.91	Significant
Post-Test	30		27.13	1.41				

To evaluate the statistical significance of this difference, a paired samples t-test was conducted, $t(29) = 37.9$, $p < .001$ analysis yielded . Given that the p-value is well below the alpha level of 0.05, the null hypothesis—which posits no significant difference between the pre-test and post-test scores—is rejected. The computed Cohen's d was 6.91, indicating an extremely large effect size. This suggests that the intervention had a powerful and meaningful impact on student outcomes.

These results provide strong evidence of a statistically significant improvement in students' performance following the intervention. The sharp increase in mean scores, coupled with the high t-value and very low p-value, underscores the effectiveness of the strategy or instruction applied. In conclusion, the intervention demonstrates a highly positive impact on student learning and achievement, and its implementation is strongly recommended for similar educational settings.

In connection with the result, Kazazoglu (2023) highlights that gamified environments enhance vocabulary development by promoting active engagement and contextual learning. Through repeated exposure in interactive, game-based settings, learners internalize word meanings and usage patterns, improving retention and confidence in applying new terms across academic and everyday communication. This approach makes vocabulary learning more effective and enjoyable.

Additionally, Mirzoyeva and Kabdrgalinova (2021) emphasized that gamification significantly boosts student engagement, focus, and resilience by using interactive games that allow repeated failure in a supportive setting. This study examines how strategies like vocabulary word games can be effectively applied through accessible digital platforms, fostering a dynamic and motivating learning environment. Integrating gamification into vocabulary instruction enhances language learning by making it more engaging and interactive. It stimulates intrinsic motivation and sustained participation.

Moreover, Erraez et al. (2025) emphasize that gamified strategies promote deeper cognitive engagement, aiding retention and application of vocabulary. This supports the call for educators to adopt dynamic, innovative techniques in classroom instruction.

Additionally, Dual Coding Theory proposed by Paivio and Clark (1991) suggests learning improves when information is presented both verbally and visually. In gamified learning, combining images, audio, and text enhances Filipino vocabulary acquisition by engaging multiple cognitive channels. This dual input strengthens memory retention and deepens understanding of the material.

Research Question No. 4: What insights do grade 4 students share regarding the implementation of the F.L.I.P intervention regarding its effectiveness in enhancing students' Filipino vocabulary?

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 Project F.L.I.P. intervention in enhancing Filipino vocabulary among grade 4 students. The major themes and sample statements 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) being motivated through game-based learning, (2) reinforcing learning through multisensory instructional strategies, (3) interactive approach enhances effective language learning, (4) supportive teaching fosters confidence in filipino language learning.

Table 5. Themes and Sample Statements on the Insights of Students in the PROJECT F.L.I.P. Intervention in Enhancing Filipino Vocabulary of Grade 4 Students

Themes	Supporting Statements
Being Motivated through Game-Based Learning	*I am happy that I can learn new Filipino words, teacher, because the games are fun. I am always excited for the next activity.* ***(IDI-01)*** *I like the games, teacher, because they are fun. I enjoyed them and now I always want to answer.* ***(IDI-03)*** *I really struggle with Filipino, teacher. But now, I want to learn because the games are fun. I can remember more now.* ***(IDI-05)***
Reinforcing Learning Through Multisensory Instructional	*Teacher, word cards would be good so we can use them at home.* ***(IDI-03)*** *Sometimes it is hard to understand the meaning of Filipino words. It might be better if*

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Strategies	*you show us cards.* ***(IDI-05)*** *Sometimes I get confused with difficult words, but if there are matching or picture games, it is more fun.* ***(IDI-01)***
Interactive Approach Enhances Effective Language Learning	*For me, it would really be better if there were more games in class so we could learn Filipino words, especially if there's acting, teacher, and singing.* ***(IDI-01)*** *It would also be nice if there were songs or rhymes in Filipino. It is easier for me to remember when it is a song rather than just reading. Maybe you could add that, teacher, the songs."* ***(IDI-02)*** *It's also fun when we do acting, teacher—I really like that.* ***(IDI-06)***
Initially Perceived the Language as Challenging	*Before, I did not like Filipino because the words were really hard to understand teacher, especially during exams." (IDI1)* *"For me, teacher, Filipino is really the hardest subject for me, and I avoid it after class, especially because I always make many mistakes in the exam." (IDI4)* *"Before, teacher, I feel weak when Filipino subject comes because I really could not understand, especially during exams, teacher." (IDI7)*
Supportive Teaching Fosters Confidence in Filipino Language Learning	*Making sentences in Filipino is really difficult, teacher. But teacher, when you teach us, I like it because you do not scold us and you teach us the meaning of the words and also give us examples.* ***(IDI-05)*** *Lisod kaayo ang Filipino para nako, ug permi jud ko mamali teacher. Pero kay lingaw an habang gina tudluan mi ninyo teacher tas dili sad mo masuko teacher maong ganahan nako teacher. Nakatabang kini nga mahimong mas confident ko sa pagsulti ug pagsulat.* ***(IDI-03)*** *Filipino is really difficult for me, and I always make mistakes, teacher. But it is fun while you are teaching us, teacher, and you do not get angry, so I like it. This helps me become more confident in speaking and writing.* ***(IDI-03)*** *I do not like Filipino tasks because they are really hard, teacher. But when we started learning, teacher, I liked it because it is fun and really exciting, teacher, because there are time-based activities.* ***(IDI-06)***

The first theme, **Being Motivated through Game-Based Learning**, highlights how gamified strategies boost motivation and vocabulary acquisition. Supporting Batu and Hashim (2022), the findings show that digital games sustain interest, promote active involvement, and make learning more enjoyable and effective. Gamification enhances understanding and retention, making it a powerful tool for diverse educational settings.

Similarly, Realo et al. (2022) found that gamification serves as an effective method for developing students' vocabulary, especially for those who often struggle with language learning. Their observations showed that interactive word games encouraged student participation, deepened contextual comprehension, and increased motivation. Students reported that such activities made learning enjoyable and helped them better understand and retain new words.

Additionally, the second theme was **Reinforcing Learning Through Multisensory Instructional Strategies**. This theme was supported by a study conducted by Hasanah (2025), which revealed that using multisensory strategies—such as visual, auditory, and kinesthetic activities—significantly enhanced vocabulary retention, making learning more engaging and effective compared to traditional methods by actively involving multiple senses.

In a parallel study, Ona and Quisido (2021) found that combining multisensory strategies with online gamified learning significantly improved vocabulary acquisition. Students exposed to visual, auditory, and kinesthetic activities alongside digital games showed better understanding and retention. This approach made learning more engaging and meaningful, enhancing vocabulary skills and contributing to better academic performance in language learning.

Moreover, the third theme, **Interactive Approach Enhances Effective Language Learning**, was supported by research emphasizing alternative teaching strategies for learners from English-speaking backgrounds. Magno et al. (2024) highlighted that gamified tasks, singing, and role-playing scenarios were effective in encouraging students to creatively use Filipino vocabulary. These interactive techniques promoted deeper cognitive processing and a stronger understanding of

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linguistic nuances. Their findings suggest that such engaging approaches not only enhance learner motivation but also help develop critical thinking skills, ultimately resulting in more effective language acquisition and retention.

Similarly, Moldez et al. (2025) found that students often learn more effectively through games and active participation, such as acting and singing. Their study showed that gamification significantly improves learner motivation, participation, and satisfaction in online language learning. Interactive activities—including Filipino language games, role-playing, and cultural immersion—provided dynamic opportunities for vocabulary development, improved comprehension, and stronger retention, contributing to enhanced learner confidence.

Notably, the fourth theme was **Initially Perceived the Language as Challenging.** This theme was supported by a study conducted by Delos Reyes, Tongkoh, and Chavez (2023), which revealed that learners face notable challenges in Filipino, particularly in pronunciation, grammar, and vocabulary, due to linguistic differences from English and limited exposure to the language. Their study highlights that increasing students' interest and exposure is essential, as these factors significantly support the transition and acquisition of Filipino language skills.

In addition, Napil and San Jose (2020) found that Filipino was among the more challenging languages to learn, especially in speaking and listening. Their study showed that students initially struggled with oral communication, suggesting that language acquisition in Filipino can be difficult without effective and supportive instructional strategies.

The last theme, **Supportive Teaching Fosters Confidence in Filipino Language Learning**, emphasizes that effective teaching practices play a crucial role in boosting attitudinal motivation and student engagement. According to Sunio and Limpot (2022), using interactive methods like online gamification creates a positive environment where students enjoy learning, boosting their confidence and interest. This highlights the role of engaging strategies in making Filipino language acquisition more effective and enjoyable.

In a parallel study, Cubillan et al. (2024) further emphasized that feedback, positive reinforcement, and low-pressure learning environments contribute meaningfully to student learning and confidence. Their findings revealed that when learners are given opportunities to practice without fear of failure, especially through gamified online tasks, they are more likely to stay motivated and enjoy the learning process. This approach encourages participation, strengthens concept mastery, and builds learner self-confidence.

CONCLUDING REMARKS

This study explored the effectiveness of "PROJECT F.L.I.P.: Fostering Language Integration through Play – An Innovative Gamification Approach to Enhance Filipino Vocabulary among Grade 4 Elementary Students" in improving learners' Filipino vocabulary skills. The intervention was designed to address existing challenges in vocabulary acquisition by offering a structured, engaging, and supportive learning environment.

Findings revealed a substantial improvement in student performance. The pre-test mean score of 11.80% reflected very low proficiency, which significantly increased to 90.43% in the post-test, categorized as "Very High." A paired sample t-test yielded a statistically significant result, $t(29) = 37.9$, $p < .001$, leading to the rejection of the null hypothesis and confirming the effectiveness of the intervention.

Classroom observations and assessment results showed notable gains in vocabulary mastery. Learners displayed heightened engagement and confidence as they participated in various F.L.I.P. activities, including Word Match Mania, Memory Game Card, Synonym Challenge, Antonym Challenge, Guess the Word, and Word Definition Match.

In conclusion, the gamified online learning approach of Project F.L.I.P. proved effective in supporting the development of Filipino vocabulary among Grade 4 students. Five key themes emerged from the study: being motivated through game-based learning, reinforcing learning through multisensory instructional strategies, interactive approach enhances effective language learning, initially perceived the language as challenging, and supportive teaching fosters confidence in Filipino language learning.

RECOMENDATION

Based on the findings of this study, the "Project F.L.I.P" intervention proved highly effective in strengthening students' Filipino vocabulary skills. The significant improvements observed highlight the critical role that gamification and play-based learning have in enhancing vocabulary proficiency. Therefore, it is recommended that educators and policymakers adopt similar interventions in their language curricula to foster linguistic development and greater proficiency in Filipino among students.

To further encourage language acquisition, it is important to integrate game-based activities that promote physical active participation and student engagement. As revealed by the students, learning through games makes the process enjoyable and helps maintain their interest in Filipino lessons, fostering excitement and anticipation for upcoming activities. This approach creates a positive and dynamic learning environment, motivating students to take part more willingly, which ultimately enhances their vocabulary retention and comprehension.

Alongside gamification, it is essential to incorporate multisensory instructional strategies that support diverse learning styles. Students emphasized the usefulness of tools like word cards, matching exercises, and picture games, which help them connect new vocabulary with visual cues, making it easier for them to remember and understand words. These techniques should be integrated into the daily learning routine, offering students various avenues to engage with the material and reinforce their learning in meaningful ways.

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Furthermore, incorporating interactive approaches such as singing, acting, and other creative exercises can significantly improve the overall learning experience. According to the students, these activities make Filipino lessons more fun and memorable, helping them recall words more easily. Teachers should consider expanding the use of these creative methods to energize lessons, as they contribute to both increased student participation and improved vocabulary retention.

A supportive learning environment is also crucial in fostering student confidence and facilitating language learning. Many students expressed that they appreciate teachers who are patient, provide clear explanations, and offer helpful examples without resorting to criticism. Such an approach encourages students to feel more comfortable making mistakes and trying to communicate in Filipino, ultimately boosting their confidence in both speaking and writing.

Finally, to ensure the successful implementation of these strategies, it is recommended that teachers receive proper training on how to effectively incorporate gamification, multisensory methods, and interactive learning into their teaching practices. By equipping teachers with the skills and knowledge to create engaging and supportive language lessons, students will have a better chance of improving their Filipino language proficiency. This comprehensive approach will contribute to sustained linguistic growth and greater academic success in Filipino.

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