Reading, Get Set, Go: A Digital Game-Based Intervention of Marungko Approach for Kindergarten Alphabet and Phonemic Awareness

Ma. Marcelyna Michaela G. Torres[1*], Ma. Nicole C. Isidro[2], Maureen Joy P. Guintu[3], Blessed Keziah G. Lopez[4], Joel B. Faustino[5], Esther G. Domingo[6], Aurora E. Perillo[7], Joseline M. Santos[8]

Bulacan State University - College of Professional Teacher Education, Guinhawa, City of Malolos, 3000, Philippines

***Corresponding Authors**

DOI: https://doi.org/10.47772/IJRISS.2026.100400458

Received: 15 April 2026; Accepted: 21 April 2026; Published: 14 May 2026

ABSTRACT

The Philippines continues to experience challenges in enhancing the foundational skills of kindergarten including literacy. These challenges create opportunities for new, interactive, and contextualized curricular materials, which urgently align with the education needs. This study developed, implemented and evaluated the "READING, Get Set, Go" a digital game-based intervention, to improve kindergarten pupils' literacy. It integrates digital skills in revised K-12 curriculum competencies which makes every lesson contextualized and age-appropriate aligned with specific learning objectives. To test the effectiveness of the READING, Get Set, Go, the research tools used were of a quantitative, descriptive-developmental design, which involved the target participants, including kindergarten teachers, master teachers, twenty-five (25) kindergarten pupils, professors, and statisticians from Bulacan State University. The study was conducted in one of the public elementary schools in Pulilan, Bulacan from a sample of a kindergarten section through a purposive-convenience sampling. The data based on the findings show a significant increase of the improvement of the pupils before and after the implementation of READING, Get Set, Go, which focuses on their initial sound discrimination, familiar word reading, and listening comprehension through digital game-based learning. These findings were significant as the foundational skills of kindergarten were integrated with digital skills that enhanced their challenges in literacy and promoted interactive and relevant experiences. On contrary, for future research it is recommended to conduct the study with a control group to avoid bias and limitation of the generalizability. On the other hand, the study serves as a foundation for further research and technological advancement for teaching and learning.

Keywords: literacy, digital-game based, kindergarten, development, contextualized

INTRODUCTION

Literacy is one of the fundamental skills for development, which identifies a positive reinforcement for lifelong learning, cognitive growth, and socio-economic participation. In early childhood, literacy is not only a beginning to acquire skills but rather a foundational support of future academic success. Literacy consists of skills, knowledge, and behavior to gain ability to read and write, mastering phonemic awareness, enhancing vocabulary development and familiarity with print recognition which is a guide to achieve progression. According to the United Nation Educational, Scientific and Cultural Organization (UNESCO) even though there was a success in enrollment, facilities, and mastery of teachers, the ability to acquire learning remained below with an evident result from approximately 272 million children worldwide. These challenges remained suppressed and a state of emergency under Sustainable Development Goal (SDG) 4 Quality Education. Despite of the challenges (Alotaibi, 2024) highlighted that 21st century skills discovered that digital game-based

learning is one of a supplementary tool for the success in early childhood to motivate and engage children's development and learning

In the Philippine context, literacy is a national priority. The Department of Education (DepEd) implemented a curriculum which is a systematic process for acquiring knowledge through various learning areas yet persistent challenges still existing particularly on the study of (Del Rosario, 2025) kindergarten pupils still show low level in reading proficiency which one of the factors from communities that are marginalized and scarce. Through integrating Marungko Approach which is a Filipino teaching method in the Philippines, it emphasized on syllabic blending and decoding of sounds to word which improves phonemic awareness for beginning readers especially in public elementary schools.

The main objective of this study is to develop and implement a product called READING, Get Set Go which is a digital game to improve the literacy skills, specifically reading proficiency among kindergarten pupils through utilization of PowerPoint presentation. According to (Aljafari and Basilio, 2025) gamified platforms showed a high engagement and potential for literacy outcome among pupils and a viable tool to captivate pupils in applying 21st century skills. Through utilization of Microsoft PowerPoint, it can be a gateway for interactive tools and meet learning goals aligned to curriculum for the pupils advancing from traditional methods (Bahadur 2015/2025). This approach had been effective for children who had been struggling readers in improving their phonological awareness and grapheme-phoneme acquisition while providing immediate feedback, consistent repetition, and rewards. These games had simulated phoneme recognition tasks (Aumentar, 2024).

METHODOLOGY

Research Design

This study employed a quantitative research design, specifically applying a descriptive-developmental framework. This methodology involves the systematic collection of numerical data through standardized and measurable instruments. The descriptive component utilized a quasi-experimental approach to evaluate the efficacy of the READING, Get Set, Go program involving a one-group pre-test and post-test design to compare performance of the sample before and after implementation. Participants received uniform treatment, and their scores were analyzed to determine the intervention's impact. Concurrently, the developmental phase focused on the creation of a research-based educational product intended for practical utilization.

Participants

The study comprised 25 kindergarten pupils from a purposively selected public elementary school in Pulilan, Bulacan. The participants were identified through convenience-purposive sampling based on their reading proficiency levels and willingness to participate. Furthermore, the research engaged a panel of educational experts, including master teacher, kindergarten educators, and professors from a public state university in Bulacan. These individuals were selected for their professional expertise and their capacity to provide suggestions and recommendations for the study.

Instruments

To evaluate the efficacy of the READING, Get Set, Go program, this study employed instruments designed to measure outcomes before and after the implementation. For pupil participants, the researchers adapted the Early Grade Reading Assessment (EGRA), an instrument validated for the Philippine educational context. This assessment utilized a pre-test and post-test design to determine the program's impact on specific literacy objectives. Furthermore, the researchers distributed the evaluations from a panel of educational experts to assess the formal structure and technical soundness of the research product. This evaluation was conducted using the Learning Resource Management and Development System (LRMDS) for Non-Print Material, a standardized rating scale established by the Department of Education (DepEd). To assess the feasibility and prospective continued use of the intervention, the Technology Acceptance Model (TAM) was applied to

measure the level of user agreement and intent for future utilization. The selection of these standardized assessment tools, which have demonstrated consistent reliability across contemporary scholarly literature, ensured the methodological rigor and reliability of the current study.

Procedure

The pre-test was conducted on January 2026 through Early Grade Reading Assessment (EGRA). The intervention was conducted in February 2026 through specifically designed weekly lesson plans over a four-week duration, supported by semi-detailed instructional guides. The curriculum for READING, Get Set, Go aligned with the Department of Education's Revised K-12 Curriculum and specific third-quarter kindergarten learning competencies, delivered through PowerPoint presentations. The themes were contextualized using local Bulacan festivals: the Halamanan Festival for initial sound discrimination, the Singkaban Festival for familiar word reading, and the Kalabaw Festival for listening comprehension. Furthermore, the program incorporated reinforcement mechanisms to provide immediate feedback, enabling pupils to distinguish between correct and incorrect responses during guided or independent learning, consistent with the theory of multimedia learning. Following the intervention, a post-test was administered to measure improvements in reading proficiency, and the resulting data were systematically organized and analyzed to address the primary research questions.

In March 2026, following the implementation of the READING, Get Set, Go intervention, the researchers conducted a post-intervention of Early Grade Reading Assessment (EGRA). This assessment aimed to identify the literacy levels of the kindergarten pupils and evaluate the significance of the program's impact on their reading proficiency. An analysis was conducted to compare variables and establish interrelationships. To evaluate the acceptance and utility of the research product, kindergarten teachers utilized an evaluation instrument adapted from the study by (Lewis, 2018) titled "The System Usability Scale: Past, Present, Future". These evaluative measures were employed to verify if READING, Get Set, Go succeeded the criteria for educational utilization.

RESULTS AND DISCUSSION

This chapter presented a detailed analysis of the data gathered from assessments using the Early Grade Reading Assessment (EGRA) on the pre-test and post-test assessments conducted among kindergarten pupils for Initial Sound Discrimination, Familiar Word Reading, and Listening Comprehension as one of the core components of kindergartens reading ability. This also included the accomplished evaluation sheets using Learning Resources Management and Development System (LRMDS) for Non-Print material. Lastly, the Technology Acceptance Model (TAM) was analyzed and evaluated.

Part I. The Pre-Test Assessment to determine Reading Proficiency of Kindergarten Pupils through Early Grade Reading Assessment (EGRA)

This table presented the summary of pre-test scores of kindergarten pupils from the Early Grade Reading Assessment before the implementation of the READING, Get Set, Go with the components of initial sound discrimination, familiar word reading, and reading comprehension.

Table 1 Overall result of the pre-test using the Early Grade Reading Assessment before the implementation of READING, Get Set, Go.

Measure	Time	MEAN	MEDIAN	MODE	SD
Initial Sound Discrimination (10)	Pretest	7.52	9	9	1.83
Familiar Word Reading (10)	Pretest	3.36	3	2	2.02
Listening Comprehension (5)	Pretest	4.44	5	5	0.77
OVERALL		**5.11**			**0.67**

Table 1 shows the overall pre-test of kindergarten pupils in terms of the three chosen components of EGRA. The initial sound discrimination gathered a mean of 7.52 and a standard deviation of 1.83 which resulted in pupils also receiving high scores. The familiar word reading gathered a mean of 3.36 and a standard deviation of 2.02 which resulted in pupils with lowest scores. While in listening comprehension, it gathered a mean of 4.44 and a standard deviation of 0.77 which pupils most scored near to the perfect scores. The overall mean was 5.11 with an overall standard deviation of 0.67 without any outliers found in between. When it comes to median and mode scores of each component, the initial sound discrimination gathered a median of 9 and a mode of 9, while in familiar word reading, the median is 3 and the mode is 2. The listening comprehension has the median of 5 and a mode of 5.The range between mean scores was 4.16, while the range for both the median and mode was 4. This illustrates that the familiar word reading obtained the lowest scores among the components of EGRA while the highest score is obtained by initial sound discrimination. This means that the pupils have mastery level in the initial sound discrimination than the familiar word reading and listening comprehension before the implementation of the intervention. In the study of (De Asis, 2025; Arquiloo, 2025) the necessity for pedagogical approaches were balanced, multimodal, and socially interactive, particularly within the framework of the Revised K-12 Curriculum.

Part II. Evaluation using Learning Resources Management and Development System (LRMDS) of Kindergarten Teachers and Master Teachers

This section provided data results from the educational experts who reviewed and evaluated the READING, Get Set, Go using the Learning Resources Management and Development System (LRMDS) for Non-Print material. The Likert Scale was divided into four (4) factors, including content quality, instructional quality, technical quality, and other factors that have been considered by the educational experts.

Table 2 Overall Evaluation of READING, Get Set, Go using LRMDS Tool for Non-Print Material

Factors	**MEAN**	**SD**	**DESCRIPTORS**	**TOTAL**	**INTERPRETATION**
1. Factor A. Content Quality	3.76	0.39	Very Satisfactory	37.6	Passed
2. Factor B. Instructional Quality	3.74	0.05	Very Satisfactory	37.4	Passed
3. Factor C. Technical Quality	3.74	0.48	Very Satisfactory	48.6	Passed
4. Factor D. Other Factors	4	0.00	Very Satisfactory	16	Passed
OVERALL	**3.81**	**0.28**	**Very Satisfactory**		

Table 2 reflected the collected data in the evaluation for Reading, Get Set, Go using LRMDS for non-print material. The scales that were used were the mean and standard deviation. The highest mean value was 3.76, which was under Factor A: Factory Content. On the other hand, the lowest value of the mean was 3.55, which was under the factor D: Other Factors which had a minimal modification on the product. There was a modal trend that was observed in the data, which was 3.74 that fell under Factor B. and Factor C. There was a little difference between the largest value, 3.74, and the smallest value, 3.55, which resulted in the range of 0.21. There was no clustered data in the set due to all of them being classified equally as Very Satisfactory. The overall mean was 3.81 while the overall standard deviation is 0.28. The LRMDS factor that obtained the highest score was Factor A. Content Quality while the lowest score was obtained by Factor B. Instructional Content. In terms of standard deviation, the score that had the most answers scattered was 0.55, while the most clustered responses of the teachers were 0.05. The overall standard deviation was 0.35, which stated that the answers were clustered or agreed to the "Very Satisfactory" description. Consequently, the research concluded that the Reading, Get Set, Go intervention served as a vital intervention outline for improving language proficiency as it was a systematic incline with LRMDS standards to ensure both quality and academic compliance in a digitalized classroom environment (Awatin & Marquez, 2025).

Part III. Implementation of Digital Game-Based READING, Get Set, Go for Kindergarten

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue IV April 2026

The Digital Game-Based Lesson Plan was designed for kindergarten teachers to implement with their pupils the READING, Get Set Go, ensuring systematic pedagogical approach. Aligned with the 21st-century literacy skills framework for kindergarten, this tool also assisted teachers in integrating digital games to facilitate teaching and learning. In the study of Chen and Tu (2021), the digital game-based for learners had a positive impact on learners' motivation, engagement, and reading results. Additionally, Adipat (2021) underscored the significance of culturally relevant content within game-based learning, which also highlighted the theme of Reading, Get Set, Go, which was age-appropriate and at the same time locally contextualized.

Below are the highlighted sub-genres of the educational game, Reading, Get Set, Go. Focusing on four (4) subgames, namely: *Sipol-Salita, Sort-Kaban, Sipol-Larawan, and Kala-Kwentuhan*

Table 3 Week 1: *Sipol-Salita*

Pangalan ng Laro: Sipol-Salita

Layunin

a. Natutukoy ang unang tunog ng salitang mababanggit.
b. Natutukoy ang unang letra ng salita na may tamang tunog.
c. Nakikilala ang iba't ibang uri ng anyong lupa at anyong tubig sa pamamagitan ng larong ito.

Gawain

Ipapakilala ang paksa ng aralin sa pamamagitan ng paglalaro ng powerpoint presentation na may pamagat na "Sipol-Salita." Sa pamamagitan ng pakikinig sa mga salitang mababanggit ay aalamin ng mga mag-aaral kung saang tunog ito nag-uumpisa at pagkatapos na ipasa ang kanilang mga sagot ay maipapakita ang bawat paliwanag kung anu-ano ang mga halimbawa ng Anyong Lupa at Anyong Tubig.

- Ang laro ay may paksa tungkol sa anyong lupa at anyong tubig

- Mayroon na salitang babanggitin at pagkatapos ay aalamin ng mga mag-aaral ang tamang unang tunog nito. Pipiliin ang tamang letra at pagkatapos ay pipindutin ang “IPASA ANG SAGOT” para malaman kung siya ay tama o mali.

- Kapag tama ang sagot ay makakatanggap ang mag-aaral ng “TAMA,” MAHUSAY,” “MAGALING” at pagkatapos ay ipaliwanag kung ano salitang nabanggit na nagsasalaysay sa aralin. Kung ang sagot naman ay mali ay may nakalagay na “SUBUKAN MULI” upang itama ng bata ang kaniyang sagot.

Table 4 *Week 2: Sort-Kaban*

Pangalan ng Laro: Sort-Kaban

Layunin

a. Natutukoy ang basurang nabubulok at ‘di-nabubulok.
b. Nababasa ang mga salita na may kaugnay na larawan.
c. Nabibigyan ng halaga ang tamang pagtatapon ng basura.

Gawain

Ipapakilala ang paksa ng aralin sa pamamagitan ng paglalaro ng powerpoint presentation na may pamagat na ”Sort-Kaban.” May kwento na ipapakita sa ppt at pagkatapos ay aalamin ng mga mag-aaral ang nabubulok at di-nabubulok sa laro at maaari din silang matuto na magbasa.

- Mayroong kwento na ipapakita na tatalakay sa magiging paksa ng laro.

- Panuto ng laro na Sort-Kaban

- Paggabay sa pagbasa ng bata ng nasa larawan. Bukod sa nagkaroon ng kaalaman tungkol sa paksa ay matututo rin ang bata na bumasa sa patnubay ng larawan. Pipiliin ang tamang basurahan at pagkatapos ay pipindutin ang “IPASA ANG SAGOT” para malaman kung siya ay tama o mali.

- Kapag tama ang sagot ay makakatanggap ang mag-aaral ng “TAMA”. Kung ang sagot naman ay mali ay may nakalagay na “SUBUKAN MULI” upang itama ng bata ang kaniyang sagot.

Table 5. Week 3: Sipol-Larawan

Pangalan ng Laro: Sipol-Larawan

Layunin

a. Natutukoy ang mga larawan sa laro.
b. Natutukoy ang unang tunog ng mga larawan.
c. Nababasa ang pangalan ng nasa larawan.

Gawain

Ipapakilala ang paksa ng aralin sa pamamagitan ng paglalaro ng powerpoint presentation na may pamagat na ”Sipol-Larawan.” May mga larawan na ipapakita at ang gagawin ng mga mag-aaral ay pipiliin kung anong

letra ito nag-uumpisa at kapag nakuha nila ang tamang sagot ay maaari din nila itong basahin.

- Panuto ng laro na “Sipol-Larawan”

- Mayroon na larawan na ipapakita at ang gagawin ng mag-aaral ay aalamin ang unang letra o tunog kung saan ito nagsisimula. Pipiliin ang tamang letra o tunog at pagkatapos ay pipindutin ang “IPASA ANG SAGOT” para malaman kung siya ay tama o mali.

- Kapag tama ang sagot ay makakatanggap ang mag-aaral ng “TAMA” at pagkatapos ay ipaliwanag kung ano salitang nabanggit na nagsasalaysay sa aralin. Kung ang sagot naman ay mali ay may nakalagay na “SUBUKAN MULI” upang itama ng bata ang kaniyang sagot.

Table 6 *Week 4: Kala-Kwentuhan*

Pangalan ng Laro: Kala-Kwentuhan

Layunin

a. Nakikilala ang pangunahing tauhan sa kwento.
b. Natutukoy ang mga pagpipilian na sagot sa bawat tanong.
c. Nasasagot nang tama ang mga katanungan na may kaugnayan sa kwento.

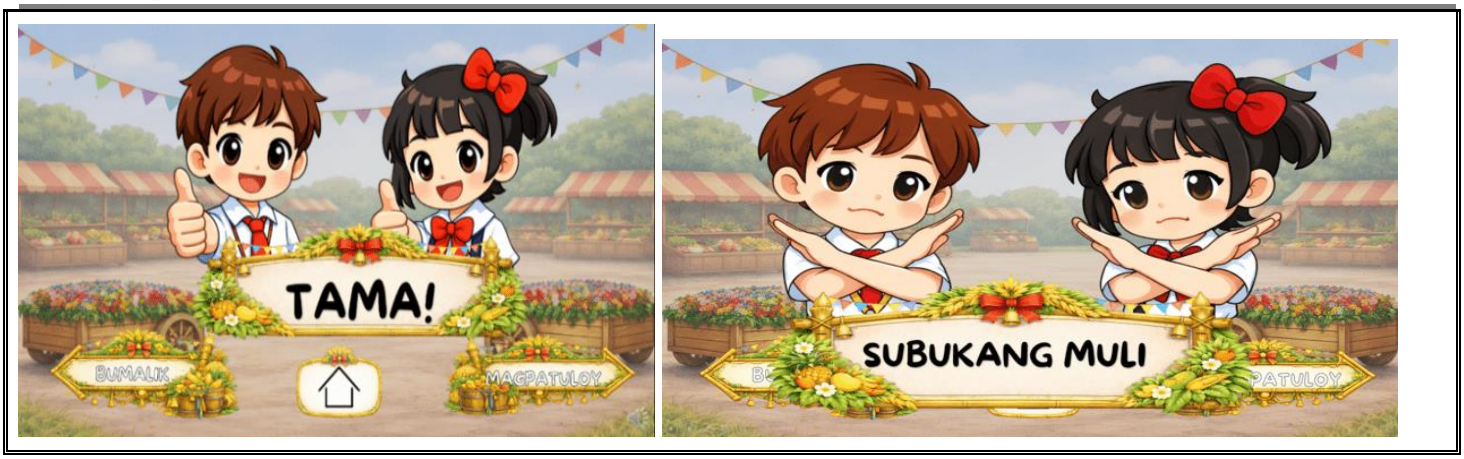
Gawain

Ipapakilala ang paksa ng aralin sa pamamagitan ng paglalaro ng powerpoint presentation na may pamagat na ”Kala-Kwentuhan.” Mayroon na kwentong babasahin tungkol sa isang hayop na ang pangalan ay Bao at ang kaniyang amo na si Ding.

- Ang pamagat ng kwento ay “Ang kalabaw ni Ding”

1. Sasagutan ang mga katanungan na may kaugnay sa kwento.

- Kapag tama ang sagot ay makakatanggap ang mag-aaral ng “TAMA,” at pagkatapos ay ipapakita ang tamang sagot mula sa kwento. Kung ang sagot naman ay mali ay may nakalagay na “SUBUKAN MULI” upang itama ng bata ang kaniyang sagot.



The tables from 10,11,12, and 13 were all of the subgames created for alphabet and phonemic awareness of the pupils using DGBI, namely READING, Get Set, Go. These games were an actual lesson for kindergarten under the 3rd grading period. It was chosen based on the learning competencies found in the Revised K-12 Curriculum for kindergarten pupils, and each lesson was integrated to teach children literacy while attaining objectives for specific weeks of learning. The lessons were only divided into 4 weeks of teaching. Each week there will be a specific lesson to teach to them specifically for Week 1 about "Anyong Lupa at Anyong Tubig," the game was integrated to different land and water forms found in the environment, the pictures and descriptions used were aligned to the intended lesson for that week. Week 2 "Nabubulok at Di-Nabubulok," the game sorting was integrated digitally on how to properly put garbage inside trash bin, pupil will learn how to control the presentation while also learning the values of throwing things in its proper place Week 3 "Bagay na may Buhay at Walang Buhay," the game was integrated on the living and non-living things through literacy and pictures, pupil will identify the first sound of the object shown and will be able to read it aloud if they guess it correctly, they can use other things to integrate it in the lesson and Week 4 "Mga hayop na Inaalagaan." The game was incorporated on how to take care of animals in a way of narrating it through a story, they are not just only listening through it but rather they build up curiosity and sparks their critical thinking through answering various questions relating to the story. These lessons were integrated with literacy, such as sounding out letters in a word, reading a word, sounding out letters of a picture, and lastly, listening to a story that can be recommended also for reading.

Part IV. The Post-Test Assessment to determine Reading Proficiency of Kindergarten Pupils through Early Grade Reading Assessment (EGRA)

This section introduced you to the overall result of the post-test scores of kindergarten pupils among the 3 components of Early Grade Reading Assessment (EGRA). This summary of the data helped to determine the baseline scores that needed to be improved after the Reading, Get Set, Go intervention was given to the pupils. This also discussed the post-test taken by the pupils to determine if there was improvement in their scores.

Table 7 Overall result of the post-test using the Early Grade Reading Assessment after implementation of READING, Get Set, Go.

Measure	**Time**	**MEAN**	**MEDIAN**	**MODE**	**SD**
Initial Sound Discrimination (10)	Posttest	9	10	10.00	1.35
Familiar Word Reading (10)	Posttest	6.76	6	5	2.05
Listening Comprehension (5)	Posttest	4.72	5	5	0.46
OVERALL		**6.83**			**0.80**

Table 7 showed the overall post-test results from Early Grade Reading Assessment (EGRA) after the implementation of READING, Get Set, Go intervention. The overall average score was 6.83 with a standard

deviation of 0.80. The Initial Sound Discrimination scored a mean of 9, median of 10, and mode 10 with standard deviation of 1.35 the phonic illustration resulted as the easiest part among pupils. The Familiar Word Reading gathered a mean of 6.76, median of 6, and mode 5 with standard deviation of 2.05 most of the pupils still having difficulty in reading the word as whole and tend to read it syllabically. Lastly, Listening comprehension resulted in a mean of 4.72, median 5, and mode 5 and standard deviation of 0.46 since most of the pupils have auditory comprehension to understand a context in a story. Initial Sound Discrimination was the category with the highest scores, suggesting it was the easiest for the pupils. The mode in this category differed from the others due to variations in the total number of items and the difficulty of the assessment. Cluster analysis of the scores per category indicated that in Initial Sound Discrimination, most students achieved near-perfect scores (9 to 10). Contrary, Familiar Word Reading showed a varied distribution, with lower scores 5 and higher scores of 9 to 10 only means that pupils varied their scores and mostly they developed well in the post-test. Listening Comprehension formed a perfect score of 5, indicating all students performed at the highest level.

The results from the Initial Sound Discrimination assessment suggested that pupils demonstrated proficiency in phonemic awareness. The skills appeared to be readily acquired, reflecting progress on auditory processing among the pupils. Conversely, the outcome of the Familiar Word Reading task was attributed to limited exposure to vocabulary or insufficient practice in decoding. Furthermore, contributing factors included the scarcity of literacy materials and reinforcement. A study by (Hornido and Amada, 2025) posited that the Early Grade Reading Assessment (EGRA) should incorporate bridge programs to address literacy deficits effectively. Collectively, these findings indicated that pupils exhibited strong skill development in sound recognition and comprehension but weaker performance in word recognition.

Part V. The Significant Difference of the Pre-Test and Post-Test Assessment after the implementation of Digital Game-Based Intervention READING, Get Set, Go

This section provides the data summary of the statistical relevance of the paired t-test of the pre-test and post-test of the kindergarten pupils using EGRA after the implementation of READING, Get Set, Go. This determined whether there is a significant difference between the pupils' pre-test and post-test scores.

Table 8 Paired T-Test between the Reading Proficiency of the Kindergarten Pupils Before and After the Implementation

Variables	Mean	T	Sig-Value	Decision	Interpretation
Pre-Test Result before the Implementation of READING, Get Set, Go	15.32	-10.86	0.001	Reject the Null Hypothesis (Ho)	There is a significant difference between the level of reading proficiency of the pupils before and after the implementation of READING, Get Set, Go inside the classroom
Post-Test Result After the Implementation of READING, Get Set, Go	20.48				

Table 8 presented data results from the conducted pre-test and post-test of EGRA that determined the reading proficiency of kindergarten pupils before and after the implementation of the READING, Get Set, Go. The table shows an immensely upward result of proficiency scores. The mean from the pre-test gathered 15.32, which increased after the post-tests with a mean of 20.48, which has a mean difference of 5.16. The t-value of -10.86, which has a high value of numbers that is far from 0, shows a significant result of the READING, Get Set, Go with a sig-value of 0.001, indicating that the researchers must reject the null hypothesis (Ho) considering that the results were not merely by chance, but this suggests that the READING, Get Set, Go had a significance in improving literacy among the skills of kindergarten pupils. In this case, the effect size (Cohen's

d ≈ 2.4) indicates a very large practical impact of the intervention. This suggests that the improvement in reading proficiency was not only statistically significant but also educationally meaningful, demonstrating substantial gains in pupils' literacy skills. From the study of De Vera and Casingal (2025) the integration of mobile applications targeting the phonics and word recognition improved kindergarten learners' learning outcomes. These studies reinforced that targeted literacy interventions are effective in bridging gaps in early literacy programs.

Table 9 Paired T-Test of Pre-Test and Post-Test Assessment using EGRA after the Implementation of READING, Get Set, Go

Measure	Mean Difference	SD Difference	t	df	p	Cohen's d
Initial Sound Discrimination	−1.48	1.98	−3.73	24	0.001	0.75
Familiar Word Reading	−3.40	2.16	−7.87	24	< .001	1.57
Listening Comprehension	−0.28	0.79	−1.77	24	0.09	0.35

Table 9 stated that a paired sample t-test was conducted to know whether there is a significant difference between the pre-test and post-test of the same group of kindergarten pupils in terms of EGRA components, namely initial sound discrimination, familiar word reading, and listening comprehension. The highest mean difference in the table is -1.48, SD 1.98, (t=-3.73), df=24), p=0.001 p<0.05),d=0.75), which states that there is a significant increase in the scores of pupils under initial sound discrimination, and since the p-value is 0.001, it rejects the null hypothesis of the study, which is that there is a significant difference between the pre-test and post-test of initial sound discrimination. Thus, the result implies that there is a significant difference between the pre-test and post-test scores of initial sound discrimination.

In terms of familiar word reading, the mean difference is -3.40 (t=-7.87, df=24, p=0.001 p<0.05, d=1.75), which indicates that there is much more significant improvement in the scores of the pupils. The p-value of the familiar word reading is 0.001 (p<0.05), which rejects the null hypothesis of the study. Therefore, the findings show that there is a significant difference between the pre-test and post-test scores of familiar words reading.

The mean difference of listening comprehension is -0.28 SD 0.79, (t=-1.77, df=24, p=0.90 p>0.05, d=0.35), suggesting that there is no significant increase in the scores of pupils wherein the pupils attained high scores from the pre-test and consistently scored high in their post-test. Since the p-value is 0.90 (p>0.05), the null hypothesis is not rejected, which means that there is no significant difference in the pre-test and post-test of listening comprehension. The urgent issue is the lack of significant improvement in listening comprehension.

The results suggest that pupils benefited from coordinated interventions in phonological awareness and familiar word reading. Consistent with prior research, Sucena et al. (2023) found that kindergarten interventions promote reading skills and produce quantifiable gains in word recognition and spelling achievement. Saquing (2025) validated the success of Marugko-based reading interventions in enhancing the noticeable improvements in familiar word reading. Cooper (2024) stressed that auditory discrimination is relevant for language attainment, supporting the significant benefits in initial sound discrimination. This occurrence happens when pupils already demonstrate strong baseline performance, leaving little room for measurable improvement. According to the study from Hagena et al. (2022) discovered that at-risk preschoolers with high pre-test listening comprehension scores demonstrated minimal post-test gains because their proficiency constrained noticeable improvement. Preschoolers who are exposed to content-rich literacy curricula demonstrated small post-test increases in listening comprehension because their pre-test scores were already high, which limits statistical significance.

Part VI. Evaluation using Technology Acceptance Model of Kindergarten Teachers

In this section, the following data will introduce you to the results of the evaluation of Reading, Get Set, Go using the Technology Acceptance Model with four parts, including Perceived Usefulness, Perceived Ease of Use, Evaluation of Attitude, and Intention, to determine the perspective of the teachers who evaluate the intervention.

Table 10 Evaluation of READING, Get Set, Go using Technology Acceptance Model

Factors	**MEAN**	**SD**	**DESCRIPTORS**
1. A. Perceived Usefulness	3.93	0.19	Strongly Agree
2. B. Perceived Ease to Use	3.89	0.28	Strongly Agree
3. C. Attitude Toward Using Reading, Get Set, Go	3.96	0.09	Strongly Agree
4. D. Intention To Use	3.97	0.08	Strongly Agree
OVERALL	**3.94**	**0.16**	**Strongly Agree**

Table 10, titled Evaluation of Attitude Towards Using READING, Get Set, Go, displayed three ratings of a mean 4.00, SD 0.00, indicating complete agreement that the program is good, favorable, and positively influential, while the lowest mean score of 3.86, SD 0.38 reflects slightly minimal revision regarding its valuable impact. Despite of differences, the overall mean of 3.96, SD 0.09 verifies a strong and consistent endorsement of the READING, Get Set, Go. This pattern showed a healthy and successful status for the program, with attitudes strongly aligned toward its effectiveness and positive role in teaching contexts. In support of (Ibrahim et al., 2022), educators' attitudes and perceived usefulness significantly drive technology adoption, even when ease of use presents challenges. Similarly, (Azuddin et al., 2021) found that teachers accepted online education but struggled with usability issues, while (Lin et al., 2023) confirmed that perceived usefulness, ease of use, and positive lecturer attitudes significantly predict adoption of digital academic tools in higher education.

CONCLUSION

It can be concluded that the study found that the results on the pre-test of kindergarten pupils show potential skills in literacy, but there is a need for improvement. By creating READING, Get Set, Go, an interactive game connected to various lessons for the third quarter, the pupils engaged, and they learned literacy skills such as initial sound discrimination, familiar word reading, and listening comprehension, which aligned to their learning competencies. After the implementation, the result from their post-test showed an improvement to their literacy skills in initial sound discrimination, familiar word reading, and listening comprehension after the intervention using the READING, Get Set, Go, which was validated by experts and strongly accepted by kindergarten teachers as useful, easy to use, and effective for classroom integration.

This improvement in literacy skills of kindergarten pupils proved the Multimedia Learning Theory, where technology-aided instructional approaches improved the early-grade reading proficiency of kindergarten pupils as well as their head start for their entry to primary year. This theory's principle is to make the game more interactive with a combination of audio and visual representations while facilitating the necessary information to acquire literacy knowledge. Therefore, the READING, Get Set, Go intervention didn't just raise test scores; it revealed how kindergarten pupils initially struggled with literacy, and these attest that the READING, Get Set, Go became an instrument for pupils to discover multiple skills, especially in digital, and the main objective is to enhance their literacy skills and become motivated, confident, and engaged.

RECOMMENDATIONS

This study can be used in a wider population if time constraint and should begin integrating READING, Get Set, Go into literacy instruction. Since pupils benefit from improved alphabet knowledge and phonemic awareness, teachers can use the game to ease the burden of teaching fundamentals while fostering active engagement. The study's findings confirm that such tools are effective, user-friendly, and well-accepted by

teachers. Policy ensured the digital game instruction and stronger literacy outcomes, aligning with the significance of providing curriculum developers with innovative methods of teaching reading proficiency, which can also be integrated to other topics aligned to the revised K-12 curriculum. To future researchers, since the sample size was only taken from one section of kindergarten in a public elementary school in Pulilan, shall expand the sample size to include more schools and diverse teacher demographics. Additionally, investigating whether READING, Get Set, Go leads to long-term improvements in reading fluency and comprehension beyond kindergarten will strengthen the reliability and generalizability of the findings. Furthermore, the study lacks control group which limits generalizability of the study, it is recommended to also conduct the study with a control group to avoid biases and to prove evidence to compare the improvement of both group. This aligns with the significance of providing a foundation for further research and technological advancement.

ACKNOWLEDGEMENTS

The researchers of this study would like to extend their sincerest gratitude to individuals who has been part of this milestone of their research journey, from the very beginning until its victorious completion. This study has made it possible with their support physically, financially, morally, and spiritually which made this research turn into an efficacious to young ones.

REFERENCES

1. Adipat, S., Laksana, K., Busayanon, K., Asawasowan, A., & Adipat, B. (2021). Engaging students in the learning process with game-based learning: The fundamental concepts. International Journal of Technology in Education (IJTE), 4(3), 542-552. https://doi.org/10.46328/ijte.169
2. Alotaibi, M. S. (2024). Game-based learning in early childhood education: A systematic review and meta-analysis. Frontiers in Psychology, 15, Article 1307881. https://doi.org/10.3389/fpsyg.2024.1307881
3. Arquillo, M. C. (2025). Pedagogical approaches competence of kindergarten teachers in the MATATAG curriculum. JETIR Research Journal. Retrieved from https://ijnrd.org/papers/IJNRD2501238.pdffr.html?id=mo_VEAAAQBAJ
4. Aumentar, E. L. (2024). MARUNGKO APPROACH THROUGH MULTIMEDIA-AIDED TEACHING AND READING PROFICIENCY OF GRADE 1 LEARNERS. 11(8). www.jetir.org (ISSN-2349-5162).
5. Awatin, M. S., & Marquez, M. F. (2025). Language learning difficulties of junior high school students in the public schools: Basis for intervention blueprint in enhancing language proficiency. EPRA International Journal of Multidisciplinary Research, 11(6), 197–208. Retrieved from https://doi.org/10.36713/epra2013https://doi.org/10.61424/issej.v3i3.349
6. Azuddin, N. A., Manan, K. A., Ghani, M. T. A., & Ghazali, W. N. W. M. (2021). Developing Questionnaires for the Technology Acceptance Model (TAM): A Study on Teachers' Acceptance of Using Online Education. UKM e-Journal System. Retrieved from https://doi.org/10.17576/JKMJC-2024-4003-30
7. Bahadur, A. (2015/2025). Using PowerPoint Presentations as a Tool for Effective Teaching and Learning of Water Science for Upper Primary Pupils in Mauritius. doi:10.18848/2327-7971/CGP/v19i02/48988
8. Chen, C.-C., & Tu, H.-Y. (2021). The effect of digital game-based learning on learning motivation and performance. Frontiers in Psychology, 12, 750711. https://doi.org/10.3389/fpsyg.2021.750711
9. De Asis, J. A. (2025). Teachers' integration of multimedia tools in teaching kindergarten: Input to literacy and numeracy enhancement. Capiz State University. Retrieved from https://doi.org/10.34104/bjah.02505190527

10. Del Rosario, L. B. (2025). Developing Kindergarten Learners' Phonemic Awareness Through Contextualized Play-Based Activities. International Research Journal of Multidisciplinary Educational Technology Studies, 7(3).
11. Department of Education (DepED). (2009). Guidelines and processes for LRMDS assessment & evaluation (Version: Final Draft 1.0). https://lrmds.deped.gov.ph/docs/LRMDSGuidelines.pdf
12. Department of Education. (2015). DepEd Order No. 57, s. 2015: Utilization of the Early Grade Reading Assessment (EGRA) and Early Grade Math Assessment (EGMA) Tools for system assessment [Department Order]. Republic of the Philippines https://www.deped.gov.ph/wp-content/uploads/2015/12/DO_s2015_57.pdf
13. Hornido, A. C., & Amada, A. T. (2025). Level Of Reading Skills Utilizing EGRA: Basis For A Proposed Bridging Literacy Gaps Program. Psychology And Education: A Multidisciplinary Journal, 44(6), 2025PEMJ4294. https://doi.org/10.70838/pemj.440608
14. Ibrahim, A., & Shiring, E. (2022). The relationship between educators' attitudes, perceived usefulness, and perceived ease of use of instructional and web-based technologies: Implications from Technology Acceptance Model (TAM). International Journal of Technology in Education, 5(4), 535–551. Retrieved from https://doi.org/10.46328/ijte.285
15. Lin, Y., & Yu, Z. (2023). Extending Technology Acceptance Model to higher-education students' use of digital academic reading tools. International Journal of Educational Technology in Higher Education, 20(34). Springer. Retrieved from https://doi.org/10.1186/s41239-023-00392-4
16. Sucena, A., Silva, A. F., & Marques, C. M. (2023). Reading skills promotion: Results on the impact of a preschool intervention. Frontiers in Education, 7, 1076630. https://doi.org/10.3389/feduc.2022.1076630
17. Saquing, C. M. B. (2025). Development and evaluation of Marungko-based reading intervention material for kindergarten learners. Journal of Interdisciplinary Perspectives, 3(1). Philippine E-Journals. Retrieved from https://doi.org/10.69569/jip.2024.0601
18. Cooper, H. (2024). Auditory processing and development of auditory discrimination skills. Journal of Phonetics & Audiology. Longdom Publishing. Retrieved from https://doi.org/10.35248/2471-9455.24.10.256
19. Hagena, Å. M., Knoph, R., Hjetland, H. N., Rogde, K., Lawrence, J. F., Lervåg, A., & Melby-Lervåg, M. (2022). Measuring listening comprehension and predicting language development in at-risk preschoolers. Scandinavian Journal of Educational Research, 66(5), 778–792. https://doi.org/10.1080/00313831.2021.1939136