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EFFECTIVENESS OF PLAY-BASED LEARNING STRATEGIES ON ALPHABET RECOGNITION SKILLS AMONG KINDERGARTEN LEARNERS

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ABSTRACT

This study examines the effectiveness of play-based learning strategies in fostering alphabet recognition skills among kindergarten learners. It addresses the need of skills in uppercase letter identification, lowercase letter identification and letter sound identification that support holistic development in kindergarten classroom at Hagpa Integrated School, Hagpa, Impasugong, Bukidnon. A pre – experimental design was utilized involving 42 learners aged 4–6 years, who participated in structured play-based learning activities during the first to third quarter of the school year. Data were gathered through pre- and post-intervention assessments, observation checklists evaluating gains in alphabet recognition, and teacher interviews providing qualitative insights. Analysis revealed significant improvements in letter-name identification, letter-sound identification, and learner engagement following the intervention. These findings indicate that play-based learning strategies positively influence early literacy skills and offer practical guidance for teachers seeking to integrate child-centered approaches into kindergarten curricula. The study underscores the value of structured play in enhancing learning outcomes and recommends further research to investigate long-term impacts and broader applications in early childhood education.

KEYWORDS: *Play – based learning, early childhood education, alphabet recognition, child – centered learning.*

INTRODUCTION

Early literacy plays a crucial role in supporting children's academic success and long-term learning development. One essential component of early literacy is the ability of children to identify and name alphabet letters regardless of sequence. This skill should be a top priority in early childhood education since it is a significant sign of how well a child will read and write in the future (Whitehurst et al. 1998).

At the kindergarten level, children are naturally curious and ready to learn language. But a lot of young learners have trouble recognizing letters because they haven't seen print enough, their teachers don't use interesting teaching methods, or they learn in different ways. These problems can make it harder for them to get ready to read and may hurt their grades in the future (Gentry, 2004).

It is important to find and use effective ways to teach kindergarten learners that meet their different needs because recognizing letters is so important. The National Early Literacy Panel (2008) stresses the importance of using planned and research-based teaching methods to help young children learn to read and write. Play-based learning is one of the best ways for young children to learn and grow. It is a way of teaching that combines learning goals with structured and guided play activities. Instead of just teaching kids directly or having them memorize things, this method lets them learn about letters through fun, hands-on, and meaningful activities.

Play-based learning is based on constructivist principles, emphasizing that children develop understanding through active participation and interaction with their surroundings (Berk & Winsler, 1995). Through games, songs, storytelling, role-playing, puzzles, arts and crafts, and manipulatives, children are able to connect abstract symbols—such as letters—to concrete experiences. For example, alphabet scavenger hunts, letter-matching games, clay letter modeling, alphabet hopscotch, and interactive storytelling can reinforce letter identification in ways that are both engaging and memorable. t integrates visual, auditory, and movement-based activities that help improve memory and address different learning preferences (Ginsburg, 2006).

In addition, play-based learning helps kids learn the alphabet and improve their oral language skills, phonological awareness, social skills, and self-esteem. According to Snow, Burns, and Griffin (1998), early literacy development involves several interconnected skills, including

alphabet knowledge, awareness of sounds, and oral language abilities. Kids are more likely to be active participants in the learning process when they learn through play. They are also more motivated and less anxious.

Providing support at an early stage is crucial in strengthening children's ability to recognize letters. The National Reading Panel (2000) says that focused teaching of letter knowledge is a big part of being able to read well. In this study, 8 out of 42 students showed that they didn't know much about recognizing letters during the Early Childhood Care and Development (ECCD) baseline assessment (Department of Education, 2019). This finding suggests the necessity for an engaging and developmentally suitable intervention capable of effectively addressing these deficiencies.

The study also looks at how different ways of learning can help teach the alphabet. Gardner's (1993) theory of multiple intelligences posits that Learners differ in how they process information, with some responding better to visual input, others to sound, and some through movement. These differences are naturally considered by play-based learning. Kinesthetic learners benefit from activities that involve movement, like alphabet relays or forming letters with their bodies. Alphabet songs and rhymes are good for auditory learners, while colorful alphabet charts and picture-letter associations are good for visual learners.

Kindergarten learners at Hagpa Integrated School have also had trouble recognizing letters of the alphabet. Preliminary evaluations suggest that several students demonstrate insufficient familiarity with the alphabet, hindering their readiness for reading and academic advancement. Structured play-based learning activities may be a good way to deal with this problem because they fit with the developmental needs of young learners.

Teachers and parents will learn about useful, play-based methods that can be used at home and in the classroom through this study. Some of these are making the environment rich in print, using games to repeat things, using interactive storytelling, and using technology in fun ways (Neuman et al. 2001). This study would seek to fortify early literacy foundations and facilitate the comprehensive development of kindergarten students by improving alphabet recognition through play-based learning, thereby equipping them for future academic achievement and lifelong education.

Framework of the Study

This study is based on several theories that together help shape the strategies and methods used to help kindergarten learners at Hagpa Integrated School improve their ability to recognize letters. Constructivist theory, especially as expressed by Jean Piaget and Lev Vygotsky, asserts that learners actively build their comprehension through experiences and interactions. Piaget's stages of cognitive development show that kids in kindergarten are naturally curious and can think symbolically. This fits with the study's focus on play-based and interactive activities that let kids learn about letters and what they mean in a hands-on way. Vygotsky's focus on social interaction in learning backs up the idea that working together can help kids learn the alphabet better. Kids learn best when they share experiences and talk with other kids and adults.

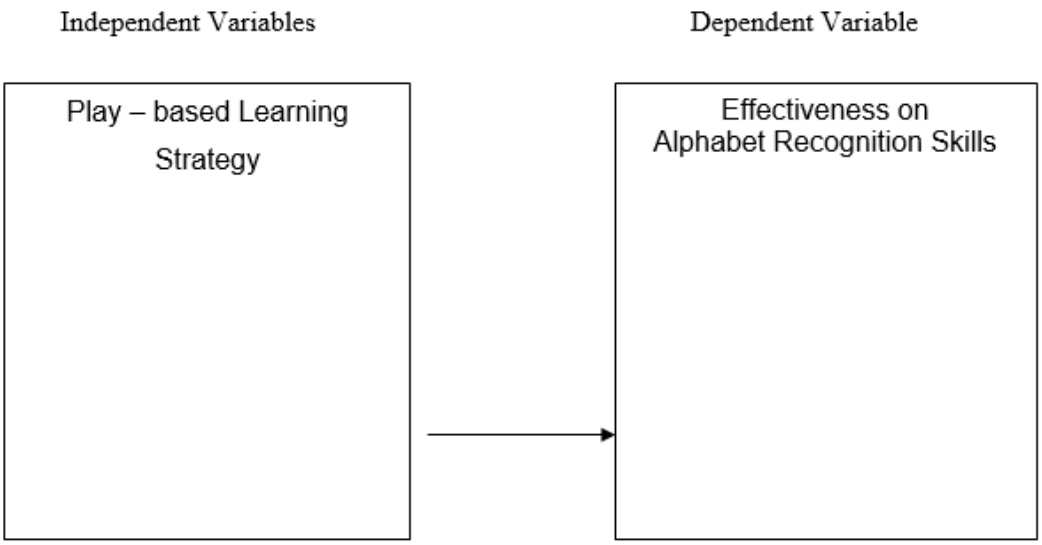
The Orton-Gillingham approach is the basis for the Multi-Sensory Learning Theory. It stresses the importance of using more than one sense—sight, sound, and touch—in the learning process. This theory is especially useful for kids because it considers that kids learn in different ways and have different preferences. The study aims to meet different learning needs by using multisensory methods to teach letter recognition. These methods include visual aids (like flashcards), auditory elements (like songs), and kinesthetic activities (like tracing letters in sand). This should help people remember and understand letters better.

Piaget's theory of development shows how kids move through different cognitive stages. It shows how important it is for kids to be ready to learn. This study considers that kindergarteners are usually in the preoperational stage, which is when they start to play with symbols and learn to talk. The study's goal is to use age-appropriate teaching methods that match the children's cognitive abilities by recognizing their developmental traits. This will make sure that the learning experiences are useful and relevant.

Albert Bandura's Social Learning Theory stresses how important it is to watch and copy others when learning. This theory backs up the idea that kids learn best when they watch and copy other people. In the context of this study, integrating collaborative learning activities enables students to witness their peers interacting with letters and words. Also, parents can help their kids learn to read and write at home, which can help them learn in school because they can copy what their parents and teachers do.

Marie Clay and others came up with the Emergent Literacy Theory, which says that the development of reading and writing skills starts early in life, even before children enter formal education. This theory stresses the range of literacy skills, such as recognizing letters, that are necessary for future success in reading and writing. The study aims to improve literacy skills during these important early years by focusing on early interventions and creating a print-rich environment. It stresses the importance of building a strong foundation in alphabet knowledge.

This theory cited, establishes a comprehensive framework that emphasizes active, multisensory, and socially interactive learning experiences. Each theory contributes valuable insights into how young learners acquire literacy skills, reinforcing the need for targeted instructional strategies that cater to individual learning styles and developmental stages. This theoretical foundation will guide the implementation of effective teaching methods aimed at enhancing alphabet recognition, ultimately supporting the holistic development of kindergarten learners at Hagpa Integrated School.



The following null hypotheses is formulated and to be tested at 0.05 level of significance:

HO1. There is no significant difference between the level of Alphabet Recognition skills of Kindergarten learners in terms of uppercase letter identification, lowercase letter identification and letter sound identification before and after the intervention of Play – based learning Strategies at Hagpa Integrated School.

Scope

This study is delimited to the kindergarten learners of Hagpa Integrated School during the School Year 2025–2026. It specifically focuses on evaluating the effectiveness of play-based learning strategies in enhancing alphabet recognition skills in terms of uppercase letters identification, lowercase letter identification and letter sound identification among young learners. The participants will be composed of a single intact class of kindergarten learners selected through purposive sampling based on their regular class enrollment.

To ensure clearer understanding, the following terms will be operationally defined:

Alphabet Recognition. Alphabet Recognition is the ability of a child to accurately identify and name all 26 letters of the English alphabet (both uppercase and lowercase) within a specified time frame, typically assessed through direct observation or standardized assessment tools. (National Association for the Education of Young Children (NAEYC). "Developmentally Appropriate Practice in Early Childhood Programs.")

Cognitive Development. Cognitive Development is the growth of a child's ability to think and reason, measured through age-appropriate cognitive assessments that evaluate problem-solving skills, memory, and understanding related to literacy tasks. (Piaget, 1973). The Child and Reality: Problems of Genetic Psychology.)

Early Literacy. Early Literacy is a composite of skills including phonemic awareness, vocabulary development, and print awareness, measured by a child’s ability to recognize letters, understand basic concepts of print, and articulate sounds associated with letters. (Whitehurst, G. J., & Lonigan, C. J. (1998). "Child Development and Emergent Literacy." Child Development, 69(3), 848-872.)

Emergent Literacy. Emergent Literacy is the early stage of literacy development that includes a child’s ability to recognize letters, understand the concept of print, and begin to connect sounds with letters, assessed through informal observations and structured assessments. (Whitehurst, G. J., & Lonigan, C. J. (1998). "Child Development and Emergent Literacy." Child Development, 69(3), 848-872.

Interactive Activities. Interactive Activities are learning tasks that require active participation from students, such as group games or hands-on letter sorting, assessed by observing student involvement and the ability to recognize letters during these activities.Vygotsky, L. S. (1978).

Interaction Between Learning and Development. In Mind in Society: The Development of Higher Psychological Processes.)

Multisensory Approaches. Multisensory Approaches are instructional techniques that involve visual, auditory, and kinesthetic modalities, such as using letter tiles, songs, and physical movement to teach letter names and sounds; effectiveness measured through student engagement and assessment scores. (Orton-Gillingham Approach. "The Orton-Gillingham Approach: A Multisensory Approach to Reading.")

Play-Based Learning. Play-Based Learning is an educational approach where children engage in structured play activities that incorporate learning objectives, with success assessed by observing children's ability to demonstrate letter recognition and related skills during play scenarios. (Pellegrini, A. D. (2005). "Recess, Academic Learning, and School Adjustment." Educational Psychologist, 40(3), 143-147.)

Pre-Experimental Design. Pre-Experimental Design is a research framework where the effectiveness of teaching strategies is evaluated using a single group of pupils pre-test and post-test on alphabet recognition skills, without random assignment to control or experimental groups. (Campbell, D. T., & Stanley, J. C. (1963). Experimental and Quasi-Experimental Designs for Research.)

Teaching Strategies. Teaching Strategies are specific instructional methods implemented during literacy lessons, which may include structured activities, guided play, and collaborative tasks designed to enhance letter recognition, assessed through lesson plans and observed classroom practices. (Tomlinson, 2001). How to Differentiate Instruction in Mixed-Ability Classrooms.)

Review of Related Literature and Studies

The reviewed literature and studies consistently highlight the importance of alphabet recognition as a foundation for early literacy development. Mastery of letter knowledge enables learners to develop reading and writing skills more effectively.

The findings strongly support the use of play-based learning as an effective instructional approach. It enhances engagement, motivation, and participation among learners. The integration of multisensory and interactive strategies is also emphasized as a way to improve

retention and accommodate different learning styles. In addition, social interaction plays a significant role in enhancing understanding through collaboration and communication.

Finally, the use of appropriate teaching strategies ensures that learners receive effective and meaningful instruction. Approaches that are engaging, flexible, and learner-centered are more likely to produce positive outcomes. Overall, the literature provides strong support for the present study, which aims to improve alphabet recognition through play-based learning strategies. These findings justify the implementation of such approaches in early childhood education.

On Alphabet Recognition

Alphabet recognition is considered a fundamental skill in early literacy development. According to Whitehurst and Lonigan (1998), the ability of children to identify letters and their corresponding sounds is a strong indicator of future reading success. This suggests that early mastery of alphabet knowledge plays a vital role in literacy acquisition.

Adams (1990) emphasized that familiarity with the alphabet enables children to decode written language more effectively. In the same way, Ehri (2005) explained that recognizing letters helps learners connect written symbols with their sounds, which is essential for reading development.

Huang (2016) found that children who were exposed to early childhood education demonstrated higher levels of alphabet recognition compared to those who were not. This implies that structured learning experiences significantly contribute to the development of literacy skills.

Similarly, Justice, Bowles, and Skibbe (2006) reported that children who acquired strong alphabet knowledge during preschool years were more likely to become successful readers in later stages. Their findings highlight the long-term benefits of early literacy instruction.

In another study, Longcamp, Zerbato-Poudou, and Velay (2018) discovered that handwriting activities are more effective than typing in improving letter recognition. The involvement of motor skills appears to strengthen memory and understanding of letter forms.

Lonigan, Schatschneider, and Westberg (2008) further noted that structured literacy programs focusing on alphabet instruction enhance children’s readiness for reading. In addition, Piasta and Wagner (2010) found that direct teaching of letter names and sounds leads to better learning outcomes compared to indirect exposure.

McBride-Chang (1999) also emphasized that alphabet knowledge contributes to the development of phonological awareness and vocabulary. Meanwhile, Puranik, Lonigan, and

Kim (2011) observed that early writing experiences, such as tracing and invented spelling, support letter recognition and literacy growth.

Blubaugh (2023) highlighted that learners who struggle with alphabet recognition benefit from multisensory instructional approaches. The use of visual, auditory, and tactile methods was found to improve retention and understanding.

On Play-Based Learning

Play-based learning is widely recognized as an effective approach in early childhood education. Alotaibi (2024) described play as a means of enhancing children's cognitive development, engagement, and motivation by allowing them to explore concepts in meaningful ways.

According to Brightwheel (2024), play-based learning integrates structured activities such as games into instruction, helping learners develop problem-solving skills, collaboration, and adaptability. This approach supports diverse learning styles and promotes active participation.

Cabug and Hatague (2023) found that play-based strategies significantly improved letter sound recognition among kindergarten learners. Their study showed that interactive activities help children establish connections between letters and sounds.

Campbell (2023) emphasized the importance of consistent and engaging instruction in mastering alphabet knowledge. The use of songs, games, and hands-on activities makes learning more effective and enjoyable.

Mielonen and Paterson (2009) observed that play enhances language development by encouraging communication and interaction among children. Similarly, Taylor and Boyer (2020) reported that play-based environments increase learners' motivation and creativity.

Bubikova-Moan, Wæraas, and Klette (2019) found that play-based learning promotes engagement and supports both cognitive and social development. Their findings suggest that this approach creates a more dynamic learning environment.

Fisher (1996) also noted that structured play activities improve children's storytelling and language skills by providing opportunities for expression and interaction.

Shams and Seitz (2008) demonstrated that multisensory learning enhances memory retention by engaging different parts of the brain. In support of this, Birsh (2011) emphasized that multisensory instruction improves reading performance, especially among young learners.

Rasinski and Padak (2008), along with Tracey and Morrow (2017), highlighted that interactive literacy activities contribute to improved comprehension and fluency.

Wood (2010) described play as an essential element in children's cognitive and social development. In addition, Hirsh-Pasek et al. (2009) introduced guided play, where teacher support enhances learning outcomes.

Weisberg, Hirsh-Pasek, and Golinkoff (2013) found that play-based learning supports language development and higher-order thinking skills. Zosh et al. (2017) further emphasized that playful learning encourages creativity, critical thinking, and problem-solving.

Han, Moore, Vukelich, and Buell (2010) reported that learners in play-based classrooms demonstrated higher levels of engagement and improved literacy performance compared to those in traditional settings.

On Social Interaction

Social interaction is an important factor in the learning process. Hurst, Wallace, and Nixon (2013) found that learners who participate in collaborative activities demonstrate a better understanding of literacy concepts.

De Felice et al. (2022) emphasized that learning is more effective when it occurs within a social context, where learners can exchange ideas and learn from one another.

Rogoff (2003) highlighted the importance of guided participation, where learners develop skills through interaction with more knowledgeable individuals. Similarly, Bandura (1986) explained that learning occurs through observation and imitation.

Slavin (2015) found that cooperative learning strategies improve both academic performance and social skills. In the same way, Gillies (2016) reported that collaborative environments enhance engagement and deepen understanding.

On Teaching Strategies

Effective teaching strategies play a crucial role in improving learning outcomes. Tomlinson (2001) emphasized the importance of differentiated instruction in addressing learners' diverse needs and abilities.

Hattie (2009) highlighted the role of feedback and assessment in enhancing student performance. Providing clear guidance helps learners understand their progress and areas for improvement.

Baker and Beasley (2017) found that interactive teaching strategies, such as guided reading and shared writing, increase student engagement and comprehension.

Marzano (2007) also emphasized that effective instructional practices significantly influence student achievement. Similarly, Rosenshine (2012) identified explicit instruction, guided practice, and repetition as key components of effective teaching.
Pressley (2006) noted that using a variety of teaching strategies leads to better literacy outcomes. Darling-Hammond et al. (2020) further emphasized that student-centered approaches improve both engagement and academic performance.

Research Methodology

A quantitative method was adopted in this study to objectively measure the effect of the intervention. More specifically, the research made use of a one-group pretest–posttest design, which is commonly used to determine changes in performance after the introduction of a specific strategy.

In this approach, a single set of learners was evaluated twice. The first assessment was carried out prior to the implementation of the intervention in order to establish a baseline level of alphabet recognition. After a series of learning sessions using play-based activities, the same group was assessed again. The variation between the two sets of results served as the basis for determining whether any improvement occurred.

The study was conducted in Hagpa Integrated School, Hagpa, Impasug-ong, Bukidnon, District of Impasugong II, Division of Bukidnon.

The respondents who served as participants in the experiment, were the Kindergarten learners of Hagpa Integrated School for the academic year 2025 – 2026. These children live in a rural community where daily life is shaped by strong family ties. Most of them come to school by walking short distances or riding with family members on motorcycles, reflecting the limited access to public transportation in the area. Their parents are primarily engaged in farming and informal labor, which often means long working hours and seasonal income. Despite these challenges, families place high value on education, encouraging their children to attend school regularly and participate actively.

Purposive sampling was utilized to determine the respondents of this study who are the Kindergarten learners of Hagpa Integrated School for the academic year 2025 – 2026 from class Mapasalamaton, 22 males and 20 females. The learners will engage and cooperate into different play-based learning given by the teacher during the day-to-day session. The study

will be conducted from June, 2025 the beginning of the school year to January, 2026 after the conduct of the third quarter examination.

The primary instrument used in this study was an adopted assessment tool designed to measure the pupils' alphabet recognition skills. The instrument consisted of three sections: uppercase letter identification, lowercase letter identification, and letter sound identification. Each section contained items appropriate to the developmental level of kindergarten learners. The questionnaire was adapted from an existing validated literacy assessment tool to ensure its reliability and suitability for measuring early literacy skills. Necessary modifications were made to align the instrument with the objectives of the study and the context of the learners. The instrument was administered as both a pretest and a posttest to determine the effectiveness of the intervention implemented in the study.

Prior to the conduct of the study, permission to administer the assessment was secured from the school head and the parents or guardians of the kindergarten learners. The adopted questionnaire was administered to the 42 pupils as a pretest before the implementation of the intervention. The assessment was conducted in a classroom setting during regular school hours. Clear and simple instructions were given orally to ensure that the pupils understood each task. Assistance was provided when necessary to clarify directions, but no help was given in answering the items. After the intervention period, the same instrument was administered as a posttest under similar conditions to *ensure* consistency. The responses were collected, recorded, and tabulated for statistical analysis.

The study made use of a 23-item researcher-developed assessment intended to evaluate the learners' ability to recognize uppercase letters, lowercase letters, and their corresponding sounds. This same set of items was utilized during both the initial and final testing phases in order to measure any changes in performance following the intervention.

Each item in the test was evaluated using a binary scoring system. Learners received one (1) point for every correct answer, while incorrect or omitted responses were assigned a score of zero (0). Partial scoring was not applied. Altogether, the highest possible score that could be obtained from the test was 23.

To determine the learners' level of performance, raw scores were also converted into percentages using this performance level classification.

Score Range	*Percentage Equivalent*	*Descriptive Rating*	*Interpretation*
19-23	*83%-100%*	*Excellent*	*Mastery of the Skills*
14-18	*61%-82%*	*Very Satisfactory*	*High Level of Understanding*
9-13	*39%-60%*	*Satisfactory*	*Moderate understanding*
5-8	*22%-38%*	*Fair*	*Low understanding*
0-4	*0%-21%*	*Needs Improvement*	*Very limited understanding*

Pre-tests are administered to all respondents to assess baseline performance or attitudes, using standardized instruments to ensure reliability and validity. After recording the pre-test scores, the intervention is implemented. Following the intervention, post-tests are administered, and post-test scores are recorded. Scores are calculated for each participant based on the pre- and post-test results, commonly using difference scores or percentage change. The data is organized in a spreadsheet or statistical software for analysis. Paired T-Test is applied to analyze the data, with results interpreted in the context of the study objectives to determine the significance of the intervention's effect.

FINDINGS

The results of the study revealed clear improvements across all measured areas after the intervention was implemented. Before the intervention, learners showed limited ability in recognizing uppercase letters, as reflected in a low average score. After exposure to the intervention, their performance increased considerably, reaching a much higher level. Statistical testing confirmed that this change did not occur by chance.

A similar pattern was observed in lowercase letter recognition. Initial results indicated difficulty in identifying lowercase letters; however, post-intervention scores demonstrated a marked improvement. The difference between the two assessments was also found to be statistically significant. In terms of letter sound identification, learners initially performed at a low level. Following the intervention, their ability to associate letters with sounds improved substantially. Analysis using a paired comparison test showed that this improvement was significant.

Looking at overall performance, the difference between the initial and final assessments was notable. From a generally low starting point, learners were able to achieve much higher scores after the intervention. Statistical results verified that this overall gain was significant at the established level. Taken together, these findings indicate that the intervention contributed positively to the development of alphabet knowledge and early phonemic awareness.

Table 1 presents the level of the kindergarten learners in uppercase letter identification before implementing then intervention.

Table 1 ***Level of Kindergarten Learners in Uppercase Letter Identification before Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	25	60%	Very limited understanding
Fair	7	17%	Low understanding
Satisfactory	5	12%	Moderate understanding
Very Satisfactory	4	19%	High Level of understanding
Excellent	1	2%	Mastery of the skill
Total	*42*	*100%*	*M = 5.33 (SD = 5.34)*

The table shows that prior to the intervention, most kindergarten learners demonstrated limited uppercase letter identification. These findings establish a clear need for a systematic, differentiated intervention that prioritizes intensive support for the majority while providing enrichment for the few advanced learners. The proposed plan therefore integrates play-based learning strategies; distributed practice; and close progress monitoring to accelerate gains and reduce the proportion of learners in the "Needs Improvement" category.

Table 2 presents the scores of the kindergarten learners in lowercase letter identification before employing then intervention.

Table 2 ***Level of Kindergarten Learners in Lowercase Letter Identification before Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	25	60%	Very limited understanding
Fair	11	26%	Low understanding
Satisfactory	3	7%	Moderate understanding
Very Satisfactory	2	5%	High Level of understanding
Excellent	1	2%	Mastery of the skill
Total	*42*	*100%*	*M = 4.67 (SD = 5.34)*

The results reveal that a majority of the scores are concentrated in the lower ranges, indicating that many students have limited understanding of the skill being measured. Specifically, the Needs Improvement category is the most frequent. This shows that 60% of the learners struggled in identifying the uppercase letters, demonstrating very limited understanding.

Table 3 presents the scores of the kindergarten learners in letter sound identification before employing then intervention.

Table 3 ***Level of Kindergarten Learners in Letter Sound Identification before Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	26	62%	Very limited understanding
Fair	10	24%	Low understanding
Satisfactory	3	7%	Moderate understanding
Very Satisfactory	3	7%	High Level of understanding
Excellent	0	0%	Mastery of the skill
Total	*42*	*100%*	*M = 4.31 (SD = 4.94)*

The table shows that the majority of students are performing in the lower ranges of understanding. Most students demonstrated very limited understanding, indicating that letter sound identification skill is not yet fully developed for the majority of the group. No student reached mastery, indicating that full competency was not achieved by any member of the group.

Table 4 presents the level of the kindergarten learners in uppercase letter identification after employing the intervention.

Table 4: ***Level of Kindergarten Learners in Uppercase Letter Identification after Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	0	0%	Very limited understanding
Fair	2	4%	Low understanding
Satisfactory	7	17%	Moderate understanding
Very Satisfactory	10	24%	High Level of understanding
Excellent	23	55%	Mastery of the skill
Total	*42*	*100%*	*M = 18.48 (SD = 5.14)*

Table 5 presents the level of the kindergarten learners in lowercase letter identification after employing the intervention.

Table 5: ***Level of Kindergarten Learners in Lowercase Letter Identification after Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	0	0%	Very limited understanding
Fair	2	5%	Low understanding
Satisfactory	9	21%	Moderate understanding
Very Satisfactory	8	19%	High Level of understanding

Excellent	23	55%	Mastery of the skill
Total	*42*	*100%*	*M = 17.9 (SD = 5.51)*

Out of 42 kindergarten learners, the majority (23 learners or 55%) obtained an Excellent rating, interpreted as mastery of the skill. Eight learners (19%) achieved a Very Satisfactory rating, indicating a high level of understanding. Nine learners (21%) were classified as Satisfactory, which reflects moderate understanding of the skill. Only two learners (5%) fell under the Fair category, interpreted as low understanding, while none of the learners were categorized under Needs Improvement.

The overall mean score was M = 17.9 (SD = 5.51), which falls within the Very Satisfactory descriptive level. This indicates that, on average, learners demonstrated a high level of understanding of alphabet recognition skills after the implementation of play-based learning strategies.

Table 6 presents the level of the kindergarten learners in letter sound identification after employing the intervention.

Table 6: ***Level of Kindergarten Learners in Letter sound Identification after Intervention.***

Descriptive Rating	***Frequency***	***Percentage***	***Interpretation***
Needs Improvement	0	0%	Very limited understanding
Fair	2	4%	Low understanding
Satisfactory	9	21%	Moderate understanding
Very Satisfactory	8	19%	High Level of understanding
Excellent	23	55%	Mastery of the skill
Total	*42*	*100%*	*M = 19.36 (SD = 4.23)*

This indicates that, on average, learners demonstrated mastery of letter sound identification skills after the implementation of play-based learning strategies. The fact that 74% of the learners were classified as either Excellent or Very Satisfactory shows that the majority achieved high to mastery-level performance. The absence of learners in the Needs Improvement category further supports the effectiveness of the intervention.

Table 7 presents paired t-test result of the kindergarten learners in uppercase letter identification before and after employing the intervention.

Table 7: ***Paired T-Test Results of Kindergarten Learners in Uppercase letter Identification before and after intervention.***

Upper Case Letter Identification	Before Intervention	After Intervention	Difference (Before-After)
Mean	5.33	18.48	-13.14
Standard Deviation (SD)	5.34	5.14	
Sample Size (n)	42	42	
t-statistic			21.4723
Degrees of Freedom (df)			41
P Value			< 0.0001
95% Confidence Interval			From -14.38 to -11.91

Legend: $p < .05$ *= Significant;* $p \geq .05$ *= Not Significant*

The findings indicate a significant improvement in learners' ability to identify uppercase letters after exposure to the intervention. The large t-value suggests a strong effect of the instructional strategy. Therefore, the intervention was effective in enhancing uppercase letter recognition skills.

Table 8 presents paired t-test result of the kindergarten learners in lowercase letter identification before and after employing the intervention.

Table 8: ***Paired T-Test Results of Kindergarten Learners in Lowercase letter Identification before and after intervention.***

Lowercase Letter Identification	Before Intervention	After Intervention	Difference (Before-After)
Mean	4.67	17.9	-13.24
Standard Deviation (SD)	5.34	5.51	
Sample Size (n)	42	42	
t-statistic			20.1721
Degrees of Freedom (df)			41
P Value			< 0.0001
95% Confidence Interval			From -14.56 to -11.91

Legend: $p < .05$ *= Significant;* $p \geq .05$ *= Not Significant*

The significant increase in mean scores demonstrates that the intervention effectively improved learners' lowercase letter identification skills. The results confirm that the instructional approach had a meaningful impact on learners' literacy development.

Table 9 presents paired t-test result of the kindergarten learners in letter sound identification before and after employing the intervention.

Table 9: ***Paired T-Test Results of Kindergarten Learners in Letter Sound Identification before and after intervention.***

Letter Sound Identification	Before Intervention	After Intervention	Difference (Before-After)
Mean	4.31	19.36	-15.05
Standard Deviation (SD)	4.94	4.23	
Sample Size (n)	42	42	
t-statistic			26.484
Degrees of Freedom (df)			41
P Value			< 0.0001
95% Confidence Interval			From -16.20 to -13.90

Legend: $p < .05$ = *Significant;* $p \geq .05$ = *Not Significant*

The results indicate that the intervention was highly effective in improving learners' ability to identify letter sounds. The very high t-value suggests a strong instructional impact on phonemic awareness, which is essential in early literacy development.

Table 10 presents overall paired t-test result of the kindergarten learners in in all skills measured before and after employing the intervention.

Table 10: Overall Performance of Kindergarten Learners Before and After Intervention.

Overall Performance	Before Intervention	After Intervention	Difference (Before-After)
Mean	4.77	18.58	-13.81
Standard Deviation (SD)	0.52	0.74	
Sample Size (n)	3	3	
t-statistic			22.2588
Degrees of Freedom (df)			2
P Value			< 0.0020
95% Confidence Interval			From -16.48 to -11.14

Legend: $p < .05$ = *Significant;* $p \geq .05$ = *Not Significant*

The overall pre-test mean was M = 4.77 (SD = 0.52), while the overall post-test mean was M = 18.58 (SD = 0.74). The mean difference was 13.81. The paired-samples t-test indicated a statistically significant difference, $t(2) = 22.26$, $p < .01$.

The findings show a significant overall improvement in learners' literacy performance after the implementation of the intervention. The consistent increase across uppercase

identification, lowercase identification, and letter-sound identification confirms the effectiveness of the play-based strategy.

CONCLUSION AND RECOMMENDATIONS

The intervention proved effective in helping learners improve their recognition of uppercase letters. It also supported the development of their ability to identify lowercase letters with greater accuracy. In addition, learners demonstrated stronger skills in connecting letters with their corresponding sounds after participating in the intervention. The strategy used in this study contributed to an overall improvement in early literacy skills among the participants. Given these outcomes, the assumption that there would be no difference between the two sets of scores cannot be upheld. The results clearly show that the intervention had a measurable impact. The findings suggest that such an approach can be a valuable tool in supporting the literacy development of young learners.

In view of the results of the study, the teachers may consider incorporating similar strategies into their classroom practices to make literacy instruction more engaging and effective for young learners. School leaders may provide support for the integration of innovative teaching approaches that focus on early literacy development. Future studies may expand this research by including a larger number of participants or by comparing results with a group that does not receive the intervention. It is also recommended that further investigations examine whether the improvements observed in this study can be sustained over time, particularly in areas such as reading fluency and comprehension. Finally, similar approaches may be explored in other learning areas or grade levels to determine their potential benefits in different educational contexts.

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