

From Compliance to Play: Enhancement of Phonemic Awareness Through Play-Based Learning Activities in Kindergarten

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Abstract: Phonemic awareness is a skill that begins developing from birth and continues to develop throughout a child's early years. In the context of 21st-century learning, there is a growing demand for students to establish a solid foundation in this skill during their early developmental stages. Despite the recognized importance of phonemic awareness, there have been instances of low achievement in this area. This study aimed to assess the impact of incorporating play-based activities on improving phonemic awareness in kindergarten learners. The variables examined within phonemic awareness include letter sound fluency, blending, and segmenting. The study employed a quasi-experimental research design and utilized purposive sampling. A total of 20 kindergarten learners from Tangway Loob Elementary School participated in the study. The primary instruments for data collection were pre-tests and post-tests. The findings revealed that, before the implementation of play-based activities, kindergarten learners had a mean phonemic awareness score of 42.58, interpreting a moderate level of awareness. After the intervention, the learners attained a mean of 56.53, also interpreted as a moderate level of awareness. The analysis revealed a significant improvement in letter sound fluency and blending skills between the pre-test and post-test assessments. However, no significant difference was observed in terms of segmenting. In conclusion, this study demonstrated the effectiveness of incorporating play-based activities in enhancing the phonemic awareness of kindergarten learners. It is recommended that these activities be integrated into instructional practices to further develop phonemic skills, which serve as a crucial foundation for more advanced literacy skills.

Keywords: Phonemic awareness; Play-based activities; Sound fluency; Blending; Segmenting

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1. Introduction

Phonemic awareness is a fundamental skill that precedes the acquisition of phonics and reading abilities and is typically nurtured through interactive games, books, and various activities. Experiences related to phonemic awareness begin to develop from a child's earliest days and continue to evolve throughout their early years. Early childhood education places a strong emphasis on achieving essential developmental milestones, competencies, and concepts that children should master as they progress from basic to more intricate skills. In

the context of 21st-century learning, there is a growing imperative for students to establish a robust foundation during their formative years.

The significance of phonemic awareness cannot be overstated, yet it has been observed that many students struggle in this critical area, which is concerning given that it serves as the cornerstone for more advanced literacy skills. Recognizing this challenge, teachers feel compelled to guide kindergarten learners in enhancing their phonemic awareness, recognizing that it will ultimately benefit them in their academic journey. Proficiency in phonemic awareness is instrumental in fostering stronger literacy skills ^[1].

However, a significant hurdle arises in engaging kindergarten learners, who are predominantly drawn to play as their primary mode of exploration and learning. Play is integral to the development of foundational skills, prompting consideration of incorporating play into the learning processes ^[2]. A theoretical perspective, as articulated by Alam (2022) through Vygotsky's sociocultural approach, underscores the importance of play-based learning for the optimal development of children ^[3]. Furthermore, the United Nations Educational, Scientific and Cultural Organization (UNESCO) underscores the significance of high-quality early childhood education as a key component of sustainable development goals. The "Completely Kindergarten: Kindergarten Curriculum Guide (2010)", the "Service Delivery Model for Students with Exceptionalities" (SDM-SE), and the integration of play-based learning all contribute to fostering healthy child development.

Balancing the instruction of literacy skills by providing children with unstructured playtime is a critical consideration in kindergarten classrooms. According to Pyle *et al.* ^[4], play has been demonstrated to enhance children's development and learning, with various play contexts, including free play and guided play, proving effective in facilitating growth and learning. Additionally, children benefit from free playtime in the classroom, allowing them to explore and engage their imagination. Numerous studies have emphasized the importance of free play in kindergarten classrooms and explored effective methods for teaching literacy within this context. Approaching teaching from a child-centered perspective, rather than a teacher-driven approach, has proven highly beneficial to young children ^[5]. It is worth noting that phonemic awareness skill instruction is particularly relevant for kindergarten students.

In light of these circumstances, the researcher, who is also a kindergarten teacher, observed a noticeable deficiency in the phonemic awareness skills of her students, motivating her to embark on this study. She contemplated the potential of integrating play-based activities as a means to enhance phonemic awareness, to ultimately improve literacy skills for her learners. As a kindergarten teacher entrusted with the responsibility of laying a solid educational foundation, the researcher was driven to pursue this study.

2. Literature review

Kenner *et al.* emphasized that phonemic awareness begins to take root in most young learners from the very day they are born as they interact with their environment ^[6]. Educators are challenged with the task of identifying the optimal timing for phonemic awareness instruction, where children can make the most progress in developing this skill. Once it was established that young children do acquire phonemic awareness skills, the next question revolved around whether a child's age or grade level had any bearing on the development of these skills.

A study examined a sample of kindergarten students who were considered at risk for reading difficulties, focusing on their initial status and growth in phoneme segmentation fluency (PSF), letter naming fluency (LNF), and letter sound fluency (LSF). These assessments were administered on an ongoing basis during the fall of kindergarten. The findings revealed that these learners demonstrated varying degrees of predictiveness in terms of their word reading fluency skills and their progress throughout the latter half of the school year ^[7].

In an action research endeavor, 16 kindergarten students from a public pre-primary elementary school in the north-central United States participated in daily whole-group lessons featuring explicit phonemic awareness instruction and guided practice. The assessment tools included pre- and post-assessments in letter-sound fluency, phoneme isolating tests, and guided practice tests ^[8].

Assessments of phonemic awareness conducted at the outset of kindergarten have proven to be valuable in predicting students' reading abilities at the end of the first and second grades. Tests assessing phoneme blending, phoneme segmenting, phoneme elision, rapid automatized naming (RAN), and letter knowledge have all shown significant predictive power regarding future reading achievement when employed with kindergarten students ^[9].

Furthermore, Utami *et al.* focused on identifying methods to engage students in developing reading skills through a play-based approach ^[10]. The conventional approach, which often relies on boxed curricula with activities like drills and worksheets, does not fully cater to the diverse learning styles of students, recognizing that they have unique developmental needs. As the formative years of early literacy, a child's skills and development play a pivotal role in shaping their abilities and awareness. Kindergarten classrooms are thoughtfully designed as child-centered programs, fostering playful environments that support children's growth and development.

3. Research objectives

This study aimed to determine the effectiveness of the utilization of play-based learning as a means to enhance the phonemic awareness of kindergarten learners of Tangway Loob Elementary School.

More specifically, it aimed to address the following objectives:

- (1) To determine the enhancement of phonemic awareness through play-based activities using the pre-test and post-test on the localized materials from the Division of Lipa City.
- (2) To ascertain the difference in the pre-test and post-results.

4. Methods

4.1. Design

The study used a quasi-experimental design. Papadakis and Kalogiannakis defined quasi-experimental design as an empirical interventional study that does not use randomization to determine the causal effects of an intervention on the target population ^[11]. In this study, the researcher used the result of the pre-test and post-test as an indicator of the effectiveness of play-based learning activities in kindergarten in enhancing phonemic awareness. The quasi-experimental design enabled the researcher to make careful analysis and interpretation of the data as well as make inferences and generalizations out of the data gathered.

4.2. Sampling

A total of 20 kindergarten learners were chosen from Tangway Loob Elementary School. This constituted the participants of the study in as much as the objectives of the study revolved around the learners and the factors surrounding their behavior and performance. They were chosen using purposive sampling.

As defined, purposive sampling is a method of choosing a group of individuals based on a specific objective ^[12]. This type of sampling is appropriate to the present study since phonemic awareness which is the topic of this study is naturally honed during kindergarten age. This also targeted the specific participants which is related to what this study is looking for.

4.3. Instrument

The main instrument that was utilized in this study was the localized pre-test and post-test as indicated in the 3B'S (Bawat Bata Bumabasa) Program crafted from the Division of Lipa City and the Standardized ECCD checklist as a form of assessment. This instrument was already validated by experts and is appropriate to be used in this study.

4.4. Data collection

To fulfill the aims and objective of this study and explore previous research, the quantitative method of data collection was the most suitable using a quasi-experimental design. The main goal of quantitative research is to collect numerically objective data through statistics of the volume of data collected from large sample sizes [13]. From this information, this method of data collection was suitable for this study which focused on the enhancement of phonemic awareness through play-based learning activities in kindergarten using the pre-test and post-test on the localized materials from the Division of Lipa City.

The researcher asked for the permission of the school principal to conduct the study. Once approved, the researcher distributed the pre-test. The data was recorded to determine the baseline data. The play-based activities were implemented. After implementation, a post-test was conducted. The result was recorded to compare the two sets of data. From this, the researcher was able to conclude the effectiveness of play-based activities to improve phonemic awareness.

4.5. Data analysis

The following statistical procedures were used to interpret the data gathered from the respondents of the study – mean and paired *t*-test. Mean was used to interpret the level of phonemic awareness of the kindergarten learners based on their pre-test and post-test scores. To score the responses, the researcher used the scale below:

Range	Verbal interpretation
0 – 20	Not at all aware
21 – 40	Slightly aware
41 – 60	Somewhat aware
61 – 80	Moderately aware
81 – 100	Extremely aware

To compare the pre-test and post-test scores, a paired *t*-test was used. This tool identified significant differences in terms of letter sound fluency, blending, and segmenting. The effectiveness of play-based activities in improving phonemic awareness was validated by this statistical tool.

4.6. Ethical considerations

Researchers must uphold the highest standard of ethics when doing research. First and foremost, the researcher asked for the consent of the respondents of the study to participate in this academic endeavor. No one has been forced to participate. They were reminded that their decline to participate would be accepted professionally.

The researcher explained the objectives of this study so that the respondents would be informed about what they were about to do. The researcher ensured that the data would be treated with utmost confidentiality. Reproduction of the result was not permitted. The researcher immediately disposes of the data so that it will not be used for other purposes. The identity of the participants was hidden, and the data remained confidential.

5. Results and discussion

This part presents the analysis and interpretation of data presented in tables and supported with corresponding implications and theoretical bases on the effect play play-based learning activities on the enhancement of phonemic awareness.

5.1. Pre-test result on phonemical awareness

Phonemic awareness is the starting skill that must be honed to progress toward better reading skills. The level of awareness on this aspect will guide kindergarten learners into more complex skills. In this study, the researcher assessed the level of phonemic awareness of kindergarten pupils before the application of play-based learning activities. **Table 1** shows the pre-test scores on phonemic awareness.

Table 1. Pre-test results

Area	Mean	Interpretation
Letter sound fluency	37.14	Slightly aware
Blending	47.60	Somewhat aware
Segmenting	43.00	Somewhat aware
Grand mean	42.58	Somewhat aware

Based on the table, it can be gleaned that the kindergarten pupils are somewhat aware of phonemics. This means that the level of phonemic awareness of learners did not meet the average level. In terms of letter sound fluency, a slightly higher level was observed. However, in terms of blending and segmenting, there is a below-average awareness of phonemics. This means that the phonemic awareness of the pupils is lagging.

The result signifies a poor performance level in terms of phonemic awareness of pupils. This means that the pupils are lagging in this aspect as the intended expectations are not met. The result implies that the pupils have insufficient phonemic awareness. This may be attributed to the mismatch of strategies used in teaching phonemic awareness. Teaching pupils may need to be better strategized, which aligns with the preferences of learners.

Concerning this, Kenner *et al.* pointed out that phonemic awareness in most young children is developed earlier as they engage in their environment from the day they are born ^[6]. It is also determined that educators need to find the best time for instruction where children can improve their phonemic awareness. Once it was identified that young children learned phonemic awareness skills, the focus was to determine if the age, or grade level, of the child made an impact on phonemic awareness skills.

5.2. Post-test result on phonemical awareness

Play-based learning activities are the utilization of interesting tasks in which learning may also take place. In these activities, pupils become more engaged and at the same time get a grasp of the skills they intend to learn. In this study, the researcher conducted play-based activities to address the low level of phonemic awareness of kindergarten pupils. **Table 2** manifests the post-test results of the learners in terms of phonemic awareness.

Based on the table, it can be gleaned that the pupils are somewhat aware of phonemic awareness. However, it can be noted that the other indicators signify a good level of phonemic awareness. In terms of letter sound fluency, there is moderate awareness among pupils as well as in terms of blending. The learners still have a long way to go in terms of segmenting but show an improvement as compared to previous results.

Table 2. Post-test results

Area	Mean	Interpretation
Letter sound fluency	61.79	Moderately aware
Blending	64.80	Moderately aware
Segmenting	43.00	Somewhat aware
Grand mean	56.53	Somewhat aware

The result implies that the play-based activities helped the pupils to gain phonemic awareness. This result may be attributed to the inclusion of highly interesting tasks for learners that stimulate their attention and fuel their learning. Kindergarten learners need an element of play to gain their attention. It entails the creativity of teachers to supply engaging activities among learners.

According to Pyle *et al.* ^[4], play has been shown to benefit children's development and learning, different play contexts, such as free play and guided play, were effective tools in facilitating the development and learning of children. Children also need to have free play time in the classroom to explore and use their imagination. There have been many studies on the importance of free play in kindergarten classrooms and how to teach literacy in the classroom. Teaching with a child-centered approach instead of a teacher-driven approach can be very beneficial to young children.

5.3. Significant difference in pre-test and post-test results

To further determine whether the play-based activities have been effective, a significant difference was identified. In this study, the researcher conducted pre-tests and post-tests to compare the results. Differences in the pre-test and post-test scores prove the effectiveness of the activity to improve phonemic awareness. **Table 3** mirrors the comparison of the pre-test and post-test results of the learners.

Table 3. Comparison of pre-test and post-test results

Area	Computed value	<i>P</i> value	Decision on H_0	Interpretation
Letter sound fluency	-8.797	0.000	Reject	Significant
Blending	-12.608	0.000	Reject	Significant
Segmenting	0.000	1.000	Fail to reject	Not significant

Table 3 shows the comparison of pre-test and post-test scores. The result revealed that there is a significant difference in phonemic awareness in terms of letter sound fluency with a *P* value of 0.000. In terms of blending, there is a significant difference in the pre-test and post-test scores as revealed by the *P* value of 0.000. On the other hand, the phonemic awareness of kindergarten pupils in terms of segmenting was revealed to be not significant as shown by the *P* value of 1.000.

The result implies that the play-based activities are effective in increasing the phonemic awareness of the kindergarten pupils in terms of letter sound fluency and blending. This means that the pupils benefited from the utilization of play-based activities. On the other hand, play-based activities have no significant impact in terms of segmenting. This means that there is a need to focus on this area and refine the activities.

Moreover, Utami *et al.* focused on finding ways to help students get inclined to reading skills while using a play-based approach ^[11]. The traditional way of teaching which uses the boxed curricula on different skills

like drills and worksheets does not solely help learners to engage in their developmental needs as learners have different learning styles covering their differences. As the foundation years of early literacy, children's skills and development are crucial in how to build their skills and awareness. Kindergarten classrooms are designed as child-centered programs with playful contexts for children to grow and develop.

6. Conclusions and recommendations

6.1. Conclusions

This study focused on determining the effectiveness of the utilization of play-based learning in enhancing literacy in kindergarten as the basis for reading innovation among the learners of Tangway Loob Elementary School. This section presents the conclusions made based on the objectives of this study.

- (1) There is a low level of phonemic awareness among kindergarten pupils.
- (2) Most of the learners have poor letter sound fluency.
- (3) The utilization of play-based activities helps in the improvement of phonemic awareness.
- (4) Play-based activities did not affect segmenting skills.
- (5) Letter sound fluency and blending can be improved through play-based activities.

6.2. Recommendations

This section presents a recommendation that can help address the issue of low phonemic awareness of kindergarten learners.

- (1) School leaders and managers may include play-based activities in the curriculum focusing on reading skills.
- (2) Teachers handling kindergarten may utilize a series of play-based activities to improve phonemic awareness.
- (3) Parents may introduce play-based activities at home to hone the phonemic awareness of learners.
- (4) Similar studies may be conducted on a wider scale to verify the effectiveness of play-based activities.

Disclosure Statement

The author declares no conflict of interest.

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