

# Play-Based Approach and Kindergarten Literacy Level

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## Abstract

A strong foundation of literacy is formed in the child's early years. This study assessed the Play-Based Approach and Pupils' Literacy Level of the Kindergarten Pupils of Balacanas Elementary School, Villanueva South District, Villanueva Misamis Oriental. It sought to answer the pretest performance of the Controlled and Experimental Groups; the posttest performance of the Controlled and Experimental Group of Kindergarten pupils; the significant difference between the pretest and posttest; and the significant difference between the posttest of the Controlled and the Experimental Group. The study employed descriptive and quasi-experiment. The primary data collection tool used was adopted from Early Grade Reading Assessment. The result revealed that the majority of the Controlled Group and Experimental Group had not reached the expected learning competency. The result showed that the Play-Based Teaching Approach is an effective literacy strategy to teach Kindergarten pupils to increase their reading literacy. It revealed no significant difference between the pretest and posttest of the Controlled Group. Moreover, there is a significant difference in the past results of the Controlled and Experimental Groups. It should be highlighted that the Play-Based Teaching Approach has a significant effect on the Pupils' Reading Literacy level. Therefore, the teachers are encouraged to plan, craft, create, and implement the said differentiated and practical play-based teaching approaches.

Keywords: Controlled, Experimental, Literacy, Play-based Approach

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## 1. Introduction

A strong foundation of literacy is formed in the child's early years. Children learn basic literacy by paying attention to and interrelating with the individuals that surround them. The child's literacy, such as language skills, reading, and writing, progresses through his interaction with the family members. As the child interacts with the individuals that surround him, this interaction happens first and foremost through play.

Play is often understood as one of the primary ways to learn in early childhood education, but this is not always the case in every setting (Edwards, 2019). Social interactions and observational learning can be effective learning environments for early childhood education. Play-based learning can be a very effective way to instruct students while allowing them to be creative on their own. It will enable students to explore, experiment, and expand on knowledge (Edwards, 2019).

Play-based learning is, essentially, learning while at play. Public schools are excellent settings for pupils to learn through play. Spacious play spaces help pupils learn how to overcome obstacles, persevere, compromise, and collaborate with others too. During play, pupils hone and use the abilities they are taught in the classroom. Schools recognize that play-based education is a vital component of a balanced approach and that, coupled with more direct teaching and instruction, it aids in maintaining each pupil's active and meaningful engagement. Play-based time can be considered play-based learning or free play time for pupils to spend burning off energy. Children under four who are left to play alone rather than using technology will develop better creative thinking and problem-solving skills (Mustafaoğlu et al., 2018).

As it is all known, literacy skills are built from the knowledge of spoken language. Through communicating with others, young children develop their own linguistic capabilities, enabling them to enhance their communicative abilities throughout their lives. Linguistic capabilities will develop the child's knowledge and improve learning, growth, and development. When children play, interact, and communicate by play, they learn how language works and understand how to interact with other people socially. This will ultimately help children connect the meaning of spoken language to written language, which is the key to success in school. In light of the above considerations, it is therefore important to study because the teacher-researcher strongly believes it is essential to understand how children develop literacy through a play-based learning approach and how this affects the pupil's literacy.

Jean Piaget's Theory of Play suggested that children's play and intellectual development are keenly intertwined. As children grow and develop, their play environment should too. This is based on Piaget's four stages of cognitive development: sensory motor stage, preoperational stage, concrete operational stage, and formal operational stage. Further, Piaget suggests that all children will go through these stages in this order but will do so at their own pace. Some children may take longer to move to the next stage than others, and this is to be expected.

Jean Piaget's Theory of Cognitive Development suggests that intelligence changes as children grow. A child's cognitive development is not just about acquiring knowledge. The child has to develop or construct a mental model of the world (McLeod, 2022). Cognitive development occurs through the interaction of innate capacities and environmental events, and children pass through a series of stages. This theory suggests that in early years, children learn most effectively when exploring the world around them and making use of all of their senses. This supported the popularity of discovery learning and sensory play. These enable children to explore their environments and provide practitioners with ideas and suggestions for activities that stimulate the senses to help keep children engaged, involved, and learning.

It focuses on development and learning theories. Development focuses on the learner's capabilities, learning focuses on realizing such capabilities, and the education within the theory is extrinsic. In the cognitive theory, the behavior reflects the emergence of various psychological structures, organized units, or patterns of thinking that influence how children interpret information (Lefa, 2019). According to Cherry (2019), cognitive developmental theories explain the change in the reasoning level of a child acquiring new ways of understanding their world. Piaget's Theory of implication assumes that all children go through the same sequence of development, but they do so at different rates. Thus, teachers must make a special effort to provide a classroom activity that includes play-based approaches for individual and small groups. Assessment should be based on individual progress. The further implication of instruction is using concrete, hands-on experiences to help learners learn additional suggestions. Piaget also emphasizes that teachers should allow opportunities to classify and group information to facilitate assimilating new information with previous knowledge present problems that require logical thinking (Damopolii et al., 2019).

## 2. Methodology

This study used quasi-experimental research. This resembles experimental research. Although the independent variable was manipulated, participants were not randomly assigned to conditions or orders of conditions. Because the independent variable is manipulated before the dependent variable is measured, quasi-experimental research eliminates the directionality problem. Pretest-Posttest Design is a type of quasi-experimental research. In a pretest-posttest design, the dependent variable is measured once before the treatment is implemented and once after it is implemented. The pretest-posttest design is much like a within-subjects experiment in which each participant is tested first under the control condition and then under the treatment condition.

After gathering the necessary data, the researcher retrieved and analyzed the collected data using statistical tools. Descriptive statistical tools like Frequency and Percentage were used for Problems 1 and 2. The Paired Sample T-test was used for Problems 3 and 4 to determine the significant difference between the pretest and posttest results of the Controlled and Experimental Group.

### 3. Results and Discussions

**Problem 1.** What is the pretest performance of the Controlled and Experimental Group of Kindergarten pupils?

**Table 1**

Pretest Reading Performance of the Controlled and Experimental Groups

Level	Controlled Group		Experimental Group	
	Frequency	Percentage	Frequency	Percentage
Consistent	-	-	8	25.0
Developing	8	25.0	9	28.1
Beginning	24	75.0	15	46.9
Total	32	100	32	100

Table 1 shows the result of the pretest Reading Performance of the Controlled and Experimental Groups from the Kindergarten. It can be seen that in the Controlled Group, the beginning level obtained the highest number of pupils which is 24 or 75%, and it is the highest among the other literacy level, such as developing and consistent levels. Meanwhile, in the Experimental Group, the beginning level obtained the highest number of pupils, which is 15 or 46.9%, compared to developing and consistency which had 9 or 28.1% and 8 or 25%, respectively. It means that in both groups, most, since not all, of the Kindergarten pupils' literacy level was not able to reach the expected competency level and only in the experimental group has obtained 8 or 25% of pupils reached the competency level. It implies that Kindergarten pupils rarely demonstrate the expected competency. It further shows that Kindergarten pupils rarely participate in class activities and/or initiate independent work and shows interest in doing tasks but need close supervision.

Moreover, some of these pupils were not yet exposed to activities that somehow practice them to work independently. When some of these Kindergarten pupils asked the reason why they do not perform well, some answered, "*dili man mi gatudloan sa balay namo teacher,*" "*busy mangud si mama teacher ug wala pud mi in-ana (referring to the reading materials) sa balay*" the lack or scarcity of reading materials and reading activities at home can be a big factor that might hinder the pupils' ability to reach the expected literacy level. It is also important to note that parents should also assist their Kindergarten pupils in the reading process. They are the ones who should provide hands-on reading activities and tasks when they are at home. Furthermore, it can be gleaned from the previous table that in both groups, the Control Group had more Kindergarten pupils who belonged to the beginning level than the Experimental Group.

On the other hand, in the developing level, both groups obtained almost the same number of Kindergarten pupils, while in the consistent level, only the Experimental Group reached the competency level. It means that in the Experimental Group, there were Kindergarten pupils who demonstrated the expected competency and that some of them participated in the different activities and worked independently while

others performed tasks and advanced in some aspects. These pupils were most likely capable of doing activities on their own. Perhaps they have been exposed to practical activities at home and other activities that involved play or games. With these considerations, the expected outcomes are met by these pupils. This study is supported by Omega et al. (2019) that early childhood educational philosophy places children's play in the center of learning as the point at which children develop their ideas and construct their knowledge. Thereby, Kindergarten pupils should be placed where they are exposed and experience to do the play. Hence, the result of the pretest was utilized as a basis to conduct the study in order to strengthen and maximize the resources readily available at hand and resources that are accessible on the internet platforms, which could be of benefit to the Kindergarten pupils.

**Problem 2.** What is the posttest performance of the Controlled and Experimental Group of Kindergarten pupils?

Table 2 presents the result of the posttest on the reading performance of the Controlled and Experimental Group of Kindergarten pupils. It can be gleaned that among the literacy level in the Controlled Group got the highest frequency with 18 or 56.3% under the Controlled Group, while the beginning level got the lowest frequency with 5 or 15.6% under the same group.

**Table 2**  
Posttest Reading Performance of the Controlled and Experimental Groups

Level	Controlled Group		Experimental Group	
	Frequency	Percentage	Frequency	Percentage
Consistent	9	28.1	31	96.9
Developing	18	56.3	1	3.1
Beginning	5	15.6	-	-
Total	32	100	32	100

This means that Kindergarten pupils' reading literacy posttest has now increased. It implies that kindergarten pupils' reading literacy level can still be improved even if the teacher utilizes the normal way of teaching process without the application of treatment. Furthermore, the result in the previous table showed that in the Experimental Group, the consistent level obtained the highest frequency of 31 or 96.9%. In comparison, the developing level obtained a frequency of 1 or 3.1% under the experimental group. This means that the dramatic increase in frequency under the experimental group has something to do with the treatment, such as the Play-Based Teaching Approach being utilized in the teaching-learning process. It implies that if Kindergarten pupils are exposed to play-based teaching approaches, there is likelihood that most of the pupils will be able to meet the expected reading competency. This is supported by Diaz et al. (2018) that play serves as a source of learning and knowledge for children at an early age. As it is commonly known, Kindergarten pupils are imaginative. They pretend to be someone or somebody else. They find joy in playing. When they are happy, they are more engaged in what they are doing; with this consideration, the use of the Play-Based Approach aided the development of the Kindergarten pupils, which improved their reading literacy level.

The result further displayed that the majority of the pupils in the Experimental Group now belonged to a consistent level. It means that they demonstrated the expected competency, participated in the different activities, worked independently and performed the task, and advanced in some aspects. Also, in the Experimental Group, there was a frequency increase of 23 when referring to the previous test conducted compared to the posttest. It implies that the application of a play-based learning approach in this group has developed pupils' different aspects. It naturally and favorably affects kindergarten pupils' social, physical, emotional, and cognitive growth; thereby, children learn most effectively while playing. Allowing pupils to

play every day is important. The finding of this study is supported by the study of Omega et al. (2019) stated that in early childhood education settings, the role of play is considered critical to children's learning.

Moreover, the application of the play-based approach is vital in developing Kindergarten pupils' reading literacy. The latter can be manifested through pupils' active participation during classroom activities, and they work independently and perform the tasks confidently. Also, the Kindergarten pupils' literacy development involved the identification of letters, letter sounds of the English alphabet from A to Z, matched upper and lower case letters, identified the beginning sound of a given word, distinguished words that rhyme, and the like. The play-based approach has bridged the gap the kindergarten pupils from the beginning level to the developing level.

**Problem 3.** Is there a significant difference between the pretest and posttest results of the Controlled and Experimental Groups?

**Table 3**

Paired Sample Test between the Pretest and Posttest Results of the Controlled and Experimental Groups

		Mean	SD	T-value	Sig.(2-tailed)	Interpretation	Decision on Ho
Controlled Group	Pretest	2.75	.83	8.18	.349	Not Significant	Accept
	Post Test	2.22	.44				
Experimental Group	Pretest	1.88	.17	8.94	.001	Significant	Reject
	Post Test	1.03	.66				

**Note:** 1.0-1.7-Consistent; 1.71-2.40- Developing; 2.41-3.0-Beginning

Table 3 shows correlation test between the pretest and post- test of the Controlled Group and the pretest and posttest of the Experimental Group. The test revealed .349, which led to the acceptance of the null hypothesis. There is no significant difference between the pretest and posttest of the Controlled Group; while the obtained p-value of the Controlled Group is less than the set alpha of 0.05, the null hypothesis is rejected, thereby revealing that there is a significant difference between the pretest and the posttest result of the Controlled Group. It means that the application of the treatment of the Play-Based Approach to the Controlled Group has an effect on the result of the pretest and posttest conducted compared to the natural way of teaching. It is supported by Parker et al. (2022) that learning through play has emerged as an important strategy to promote student engagement, inclusion, and holistic skills development beyond the preschool years. Furthermore, the table took the analysis at the independent variable level by looking at the test of difference while holding the dependent variable constant at a time. As can be seen from the same table, independent variables are significant at 0.05. Pupils' pretest reading level has no significant effect on pupils' posttest reading level results.

On the other hand, pupils' pretest reading level has no significant effect on the posttest reading level. In general, considering the coefficient level, the pupils' reading pretest of the pupils was not a good predictor of their posttest reading performance, with a p-value greater than 0.05. Thus, the correlation analysis yielded that the null hypothesis test was accepted. Meanwhile, the pretest reading result has a significant effect on the posttest reading level of the pupils in the Experimental Group. Therefore, the correlation analysis yielded that the null hypothesis was rejected.

**Problem 4.** Is there a significant difference between the posttest results of the Controlled and Experimental Groups?

**Table 4**

Paired Sample Test between the Posttest Results of the Controlled and Experimental Groups

		Mean	SD	T-value	Sig.(2-tailed)	Interpretation	Decision on Ho
Controlled Group	Post Test	1.88	.44	7.04	.000	Significant	Reject
Experimental Group	Post Test	1.03	.17				

**Note:** 1.0-1.7-Consistent; 1.71-2.40- Developing; 2.41-3.0-Beginning

Table 4 illustrates the significant difference between the posttest results of the Controlled and Experimental Groups. The result revealed a significant relationship between these two variables. The obtained p-value is lesser than 0.05, which led to the rejection of the null hypothesis. Thus, it showed that there is a significant relationship between the posttest results of the Controlled and the Experimental Group. Furthermore, the result revealed enough significant differences between the posttest of the Controlled and the Experimental Group. This means that the Controlled Group test result has nothing to do with the Experimental Group test result. Although each group was exposed to different treatments which is the natural classroom setup and the utilization/application of Play-Based Teaching Approach since they were set up in one setting, perhaps the Controlled Group was influenced by the Experimental Group. Also, the Play-Based Teaching Approach must be implemented together with the Experimental Group.

## Conclusions

The following conclusions were drawn from the findings of the study: The Controlled Group and the Experimental group have not reached the expected learning competency. Play-Based Approach is an effective literacy strategy to teach Kindergarten pupils to increase their reading literacy. There is no significant difference between the pretest and posttest of the Controlled Group, while there is a significant difference in the pretest and posttest of the Experimental Group. There is a significant difference between the past result of the pretest and posttest in the Controlled and the Experimental Group.

## Recommendations

Based on the findings and conclusions of the study, the following recommendations are hereby made: The Play-Based Learning Approach can be applied, utilized, and maximized throughout the Kindergarten pupils of Balacanas Elementary School in order to develop their literacy level. Also, the application and utilization must be made throughout the year if it is feasible for a meaningful and better results. The Kindergarten could be given differentiated and practical play-based learning to arouse their interest in participating actively in the activities provided to maintain and sustain the expected learning competency. The result of this study can be introduced and disseminated during the In-SET and SLAC sessions. It should be highlighted that the Play-Based Teaching Approach has a significant effect on the Pupils' Reading Literacy level. Therefore, the teachers are encouraged to plan, craft, create, and implement the said differentiated and practical play-based teaching approaches

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