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## UTILIZING PLAY BASED APPROACH TO IMPROVE THE NUMERACY SKILLS OF SELECTED GRADE 3 PUPILS AT WAWA ELEMENTARY SCHOOL

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### ABSTRACT

This study aimed to improve the numeracy skills of selected grade 3 pupils after the pandemic. Teaching numeracy skills have been a great challenge to teachers ever since, but it became a greater burden during remote learning.

Children often demonstrate understanding through play, both verbally and non-verbally. Play is the perfect vehicle to teach tricky mathematic concepts to toddlers and young children. Not only does hands-on play help children pay attention for much longer periods of time, but it also helps children gain a more well-rounded understanding of Math concepts. When children explore concepts like numbers, shape and measure through play, these things become much more than marks in black and white on paper. They'll start to see Math in tangible objects in the world all around them, and they can explore these concepts themselves every day and converse about their mathematical thinking during play (Parks, 2015).

At the beginning of the study, forty-two (42) pupils were under needs major support, there were nine (9) under anchoring, while there were no pupils identified as developing and emerging. Based on the results of this study, it is very evident how the said intervention played a significant impact in improving the numeracy skills of the pupils who need major support, from 42, it has dropped to 27. In the anchoring level, it has improved from 9 to 12 pupils. And 9 pupils advanced to emerging level after the intervention was administered.

Based on the data presented, the researcher therefore concludes that using play-based approach in learning Mathematics is indeed relevant and effective in developing the said skills.

**Key Concepts:** Numeracy, Play based approached, Emerging, Anchoring

### INTRODUCTION

Math and play are at two opposite ends of the spectrum; one is full of rules and equations, the other is unruly and imaginative fun. However, for young children, Math and play have a lot in common. They both include exploring exciting new concepts and finding out interesting new things.

Piaget believes that through play and exploration that students develop a mathematical understanding while using ordinary objects to construct meaning. It is important that students have access to play-based learning in the early childhood mathematics classroom while experiencing a culturally sustaining environment (Zippert et al, 2019; Worthington & Van Oers, 2016).

On the other hand, Hauser (2005) claims that kindergarten students are highly eager to learn and that play can be a powerful vehicle for learning (as cited in Vogt et al., 2018, p. 592).

Children learn in many ways, and it is important to include hands-on learning experiences during Mathematics class (Graue et al., 2014).

Vogt and colleagues (2018) state that "play can be defined as activities that are fun, voluntary, flexible, involve active engagement of the child, have no extrinsic goals, and often have an element of make-believe" (p. 592). This definition aligns with children needing to have time to play with manipulatives and new concepts through play-based learning. Children need time to choose activities to demonstrate their mathematical thinking and understanding through play (Parks, 2015).

Research suggests that play-based learning can be beneficial for all students and offers various ways to learn and display mathematical knowledge (Vogt et al., 2018).

Due to pandemic, children's actions became limited, and they were just confined in the four corners of their houses. This restricted them from enjoying the things which they enjoy and love most which is playing. By injecting play in learning Math concepts, teachers will be hitting two birds in one stone.

This prompted the researchers to conduct a study utilizing play-based approach in developing the numeracy skills of the pupils especially that problems related with it has aggravated due to pandemic.

### STATEMENT OF THE PROBLEM

This research aimed to determine the effectiveness of using play-based approached to improve the numeracy skill level of selected grade 3 pupils at Wawa Elementary School for the school year 2022– 2023.

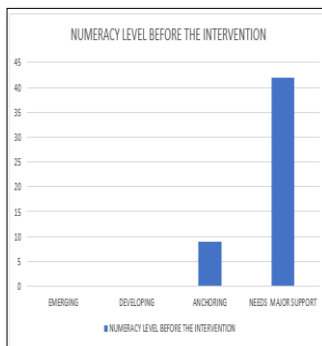
Specifically, this study sought to answer the following:

1. Is there a significant difference between the numeracy level of Grade 3 pupils before and after the intervention?
2. How can the use of play-based approach improve the numeracy level of selected Grade 3 pupils?

### METHODOLOGY

Purposive sampling was utilized to select forty-two (42) pupils who were the subject of this study. Pre and post assessments using eNAT tools were done to identify the number of pupils classified under the different numeracy skill level. Quantitative analysis was used in interpreting the results of the study.

### RESULTS AND DISCUSSIONS



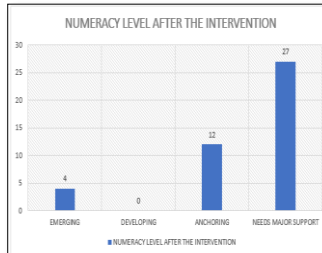
The graph shows that the number of pupils who need major support is very high which is 42, anchoring is 9, while there were no pupils identified as developing and emerging. The said data were generated before the intervention was given.

The 2<sup>nd</sup> graph on the other hand shows data after the intervention was implemented.

It presents that the number of pupils who need major support has decreased from 42 to 27 which is indeed a tangible proof that the intervention was effective in developing the numeracy skills of grade 3 pupils.

It also presents that the number pupils in anchoring level have improved from 9 to 12. Four pupils under emerging level has been identified after the intervention was administered.

Based on the data presented, it can therefore be concluded that using play-based approach in learning Mathematics is indeed relevant and effective in developing the said skills.



### CONCLUSION

The use of play-based approach in improving the numeracy skills of the grade 3 pupils is not just effective but also relevant esp. that they have been in remote learning due to pandemic.

### RECOMMENDATIONS

- Teachers should be more creative in thinking of games for a specific topic.
- Instructions should be clear as to what are expected by the teacher on how students should execute the activity.
- Consistent implementation and execution of the intervention should be done to ensure mastery of the lesson.

### REFLECTION

The researcher realized that learning can be made more meaningful by injecting activities which are very near to the heart of the pupils such as the use of play-based approach. We have been so engrossed in using so many complex strategies to the point of overlooking the basic ones.

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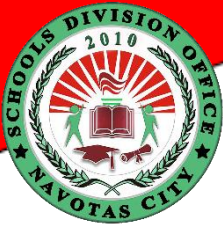
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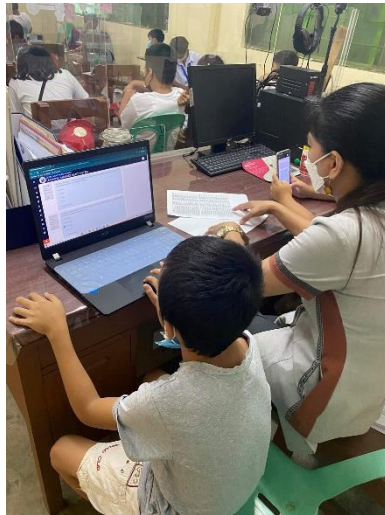
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