

Use of One-on-One Tutoring and Technology Integration in Kindergarten Education: A Quasi-Experimental Study

¹Maria Gerle B. Lastimosas; ²Maedel Joy Ventura-Escote, Ph.D.
Member, Department of Education, Division of Tagum City
Member, Professional School of Assumption College of Nabunturan

Abstract:- This study aimed to investigate the impact and effectiveness one-on-one tutoring and technology integration in kindergarten educational settings through a Quasi experimental research design; utilizing a pretest and post-test for both control and experimental groups to assess the effectivity of the treatment and two different learning plans intended for experimental and control group together with the Table of Specification (TOS) that served as the research instrument for this study. The subjects of the study were the Kindergarten Students Section-Parrot of Mangga Elementary School. This class has morning and afternoon shifts: the morning shift served as the control group (A) and the afternoon served as the experimental (B). There were 41 students in all, with in the control group and in the experimental group. Furthermore, the level of performance of the students after the study of the two groups revealed that the competency level of experimental group has the Very Satisfactory level with 84% class proficiency while the control group has 59% class proficiency: did not meet expectation. The study's findings indicate that the experimental group (Group B), which received technology integration and one-on-one tutoring, showed significantly higher improvement in class proficiency compared to the control group (Group A), which followed traditional learning methods. The study recommends that schools should consider integrating technology interventions and one-on-one tutoring into their curriculum. The significant improvement observed in the experimental group suggests that these methods effectively enhance student learning outcomes.

Keywords: *Technology Integration, One-on-One Tutoring, Quasi-Experimental Research Design, Kindergarten Students, Experimental Group, Control Group.*

I. INTRODUCTION

Kindergarten readiness, encompassing intellectual ability, academic skills, and classroom engagement, was found to significantly impact future academic performance among French-Canadian children in the Quebec Longitudinal Study of Child Development (Fitzpatrick, 2017). Three readiness profiles emerged: high (57%), moderate (34%), and low (9.3%). Assessments during kindergarten included number knowledge, receptive vocabulary, fluid intelligence, and teacher-rated engagement. The study revealed that a more

favorable kindergarten readiness profile predicted stronger academic performance in fourth grade, highlighting the importance of early identification and targeted interventions to support at-risk students and improve educational outcomes.

According to Dixon and Shen (2019), the lack of technology integration in Alabama's public schools has been linked to a 30% lower performance in reading, language, mathematics, and computer literacy tests compared to students in most other states (U.S. DoE, NCES, 2016). Additionally, the state's high school dropout rate was 29% in 2005, 25% in 2013, and decreased to 11% in 2015, surpassing the national average of 6.5% (McFarland, Stark, & Cui, 2016). Alabama's education system has received lower ratings than other states, attributed in part to inadequate technology integration resulting in poor performance on statewide tests and higher dropout rates (U.S. DoE, NCES, 2016). Furthermore, the crime rate in Alabama has shown a steady increase, with cities like Birmingham frequently listed among the top 100 worst places to live, known for high crime rates, including ranking fifth highest in crime and third in violent crime in the U.S.

In Philippine context, government and non-governmental agencies have mobilized efforts to address the learning gaps exacerbated by school closures and remote learning during the pandemic over the past two years. These gaps primarily result from limited access to essential resources among learners in low to middle-income brackets, including technology (devices, applications, and internet connectivity) and learning materials (printed modules). Particularly concerning is the learning loss observed in early grades (kindergarten to grade 3), termed as key stage 1 by education leaders. The Department of Education Region 5, led by its regional director, was an early proponent of a learning recovery plan aimed at mitigating these losses and improving instructional quality through evidence-based learning programs. Notably, research underscores the effectiveness of tutoring, being 20 times more effective in math and 15 times more effective in reading (Magno, 2020).

In Mangga Elementary School, where the researcher is actively engaged in teaching within Kindergarten Section Parrot, has keenly observed a pervasive challenge within her class. Specifically, there exists a notable struggle in retaining information, particularly concerning letter recognition,

posing hindrances to effective reading instruction. Furthermore, the Kindergarten class exhibits a deficit in focus, rendering them susceptible to frequent disruptions. In response to these challenges, the researcher is undertaking this study with a distinct emphasis on employing technology integration and one-on-one tutoring. The intent is to harness these strategies as a solution to enhance information retention and concentration, addressing the current impediments faced in the learning environment of Mangga Elementary School.

II. METHOD

The methodologies and processes employed in the study are discussed in this chapter. The research design, research locale, subjects of the research, research instruments, research procedures, data analysis, and statistical treatment of data are all included.

A. Research Design

This study employed a quantitative quasi-experimental 2 groups: pre-test and post-test research design that shared similarities with experimental research but lacks full randomization of participants into control and experimental groups. This design is employed when complete random assignment is impractical or unethical, yet the researcher seeks to establish causal relationships by manipulating an independent variable and observing its effects on a dependent variable. Quasi-experimental designs allow for the examination of cause-and-effect relationships within real-

world settings, providing valuable insights despite the inability to achieve full experimental control, as highlighted by Creswell (2014).

The data for the study was gathered using a quasi-experimental manner. Donald T. Campbell devised the quasi-experimental approach to generalize casual inference. The research design was a pretest-posttest group design wherein both groups were given pretests in the beginning and posttests at the end of every period under consideration (Padua, 2000).

B. Research Locale

The study was set to take place at Mangga Elementary School in Tagum City, Davao Del Norte, which has a total of 2,700 students and 75 regular teachers for elementary education. This school was chosen because it is easily accessible and where the researcher works.

C. Subjects of the Study

The subjects of the study were the Kindergarten Students Section-Parrot of Mangga Elementary School. This class has morning and afternoon shifts. For the purposes of the research, classes were divided into two sessions: morning and afternoon shifts. The morning shift served as the control group (A) and the afternoon served as the experimental group (B). There were 41 students in all, in the control group and in the experimental group. The distribution of the study's subjects is shown in Table 1.

Table 1: Subjects of the Study

GROUP	Total	
	N	%
Control (Group A)	18	43.90
Experimental (Group B)	23	56.09
TOTAL	41	100

Table 1 shows the total number of students in each group and their corresponding percentages. Group A as experimental group and Group B as control group. A total of 23 students in morning shifts are respondents of the study, 56.09 % of these belong to Group A, the experimental group, and 43.90 % belong to Group B, the control group. A total of students was 18 in afternoon shifts. All in all, there were 41 students that comprises a total of 100%.

D. Research Instrument

The students were randomly divided into two groups, with group A serving as the control group and group B serving as the experimental group. The pretest was the same for both groups, which was the conventional paper-and-pen testing. Students in Group B (experimental) were given an intervention after the pretest, in which they underwent two types of treatment: technology intervention and one-on-one tutoring. Group A (control) underwent the usual traditional learning approach. Afterwards, a posttest was administered to both groups using paper-and-pen assessment.

For this study, the researcher prepared 2 Learning Plans that contained traditional learning approach for the control group and adaptive learning strategies (technology intervention and one-on-one tutoring) for experimental group.

A Table of Specifications (TOS) was also prepared so that the items of the test can be distributed to the different skills. For the pretest, the researcher used a teacher-made test that contains 20 items-questions, and the same questions was given after the intervention which served as posttest. The following test was a multiple choice examination with four choices for each item and as well as the questions were arranged from Low Order Thinking Skill (LOTS) at 40% to High Order Thinking Skill (HOTS) at 60% based on the competencies. Using the suitable statistical method, the item analysis, reliability test, and validity test were also examined.

E. Validation of the Research Instruments

The research instrument such as the two learning plans consist of two different approaches and the pretest/posttest that was presented to the researcher's validators and research adviser for comments and suggestions. After validation, the two learning plans were carried out first to a group that is not part of the subject of the study. Then they answered the pretest/posttest assessment to determine the strengths and weakness of the test. The pilot testing of the learning plans and the pretest/posttest helped the researcher for the experimental group's effective implementation.

The pretest-posttest was meticulously organized, and it included the presentation of the Table of Specification (TOS) to ensure that the test items were distributed properly. The details of the instrument would be provided to the researcher's validators and research adviser for ideas and comments.

Students who were not in the control or experimental groups were given the preliminary questionnaires to complete. Using the suitable statistical method, the item analysis, reliability test, and validity test was examined. In the pilot testing, 25% of the total number of students was chosen and divided into upper and lower score groups, which will then assess the indices of difficulty, discrimination, and options. The results of the analysis were sent to her peers, advisers, and other authorities for review and finalization.

F. Research Procedure

During the data gathering procedure, the researcher developed a researcher-made questionnaire to serve as both a pre-test and post-test for the control and experimental groups. Subsequently, five professionals were consulted to validate the questionnaire. After obtaining validation from these professionals, the researcher proceeded with the study.

Throughout this study, the researcher partitioned her class into two segments. The first half constituted the control group, receiving traditional teaching methods, while the second half formed the experimental group subjected to treatment. The experimental group benefited from both technology integration and one-on-one tutoring. The assessment of both groups involved scrutinizing their pretest and post-test scores. This comparative analysis aimed to ascertain the effectiveness of the intervention facilitated by

the application of one-on-one tutoring and technology integration in enhancing the learning outcomes of the experimental group.

The researcher provided a letter of authorization where they all signed granting for approval. First to the Davao del Norte Schools Division Superintendent office for the conduct of this research at Mangga Elementary School. The letter was promptly given to the school principal of Mangga Elementary School where the researcher conducted the study.

After the approval of the heads of offices, the needed instruments such as the Learning Plans and the pretest-posttest was prepared for the experiment. The validated pretests were then given to a group that was not a part of the study's subject to see if they were reliable and valid. Right after the instruments were proven valid and reliable, they were immediately used for both the control and experimental group to test the efficacy of the intervention.

G. Statistical Treatment of Data

The data was structured and compiled to produce readable findings. In order to accurately analyze and interpret the various data collected in this study, JASP was utilized, and the following statistical tests was used.

Mean and Class Proficiency. This was used to determine the competency level of the two groups according to their pretest and posttest result and sought to answer problems 1 and 2.

III. RESULTS

This chapter presented the results obtained from the collected data and the subsequent analyses in a sequence corresponding to the problems presented. Data and preliminary information were also provided as the basis for the computation and interpretation of the results. These results were computed using JASP software.

A. Competency Level of the Pretest Scores of the Groups

Table 2 showed the results of the competency level of the pretest scores of the control and experimental group.

Table 2: Competency Level of the Pretest Scores of Control and Experimental Group

Pretest	No. of students	Mean	Class Proficiency	Competency Level
GROUP A (CONTROL)	18	6.7	33.5	Did Not Meet Expectation
GROUP B (EXPERIMENTAL)	23	6.3	31.5	Did Not Meet Expectation

The data above illustrated the baseline performance of students in both the experimental and control groups prior to the intervention. The experimental group demonstrated a class proficiency level of 31.5%, while the control group showed a slightly higher proficiency level at 33.5%. Despite the slight difference, neither group achieved the expected performance standards, indicating a general need for improvement across both cohorts. This initial assessment

highlighted the comparable starting point of the two groups, underscoring the significance of the subsequent intervention in potentially enhancing student performance and meeting educational expectations.

B. Competency Level of the Posttest Scores of the Groups

Table 3 showed the results of the competency level of the posttest scores from the control and experimental group.

Table 3: Competency Level of the Posttest Scores of Control and Experimental Group

Posttest	No. of students	Mean	Class Proficiency	Competency Level
Group A (Control)	18	11.8	59	Did Not Meet Expectation
Group B (Experimental)	23	16.8	84	Very Satisfactory

Table 3 presented the level of performance of students after the study, revealing a pronounced disparity between the experimental and control groups. The competency level data indicated that the experimental group, which was subjected to adaptive learning strategies including technology intervention and one-on-one tutoring, achieved a Very Satisfactory level with an impressive 84% class proficiency. This substantial improvement highlighted the efficacy of innovative and personalized teaching methods in fostering higher academic achievement. In stark contrast, the control group, which continued with traditional learning approaches, managed only a 59% class proficiency, which did not meet the expected standards. This significant difference between the two groups underscored the potential benefits of employing modern educational interventions tailored to

individual learning needs. The findings advocated for a re-evaluation of current educational practices, suggesting that integrating adaptive learning strategies can significantly enhance student outcomes. The study highlighted the critical need for educational reforms that embrace technological and personalized learning solutions to bridge the proficiency gap and elevate overall student achievement levels.

C. Significant Difference Between the Mean Scores of the Pretest and Posttest Mean Scores of the Students in Control Group

Table 4 showed the results of the paired t-test use to compare the achievements of the students in the control group.

Table 4: Comparison of the Achievement of the Students in the Group A (Control)

	Mean	P-Value	Decision
PRETEST	6.7	0.001	Significant
POSTTEST	11.8		

The table provided a detailed comparison of the academic achievements of students in Group A, which served as the control group and followed traditional learning strategies. Initially, the pretest scores for this group averaged 6.7, reflecting their baseline academic performance. After implementing the traditional learning strategies, the posttest scores showed a significant improvement, averaging 11.8. The statistical analysis yielded a P-Value of 0.001, which was substantially lower than the threshold of 0.05. This low P-Value indicated that the observed improvement in scores was statistically significant and unlikely due to random chance. Consequently, the null hypothesis, which suggested there would be no significant difference in student achievement as a result of using traditional learning methods, was rejected.

These findings clearly demonstrated that the traditional learning strategies had a notable and positive impact on the academic performance of kindergarten students in the control group. This result underscored the efficacy of conventional teaching methods in enhancing student learning outcomes, validating their continued use in early childhood education settings.

D. Significant Difference Between the Mean Scores of the Pretest and Posttest Mean Scores of the Students in the Experimental Group

Table 5 showed the results of the paired t-test used to compare the achievements of the students in the control group.

Table 5: Comparison of the Achievement of the Students in the Experimental Group

	Mean	P-Value	Decision
PRETEST	6.3	0.001	Significant
POSTTEST	16.8		

The table presented a comparison of the academic achievements of students in Group B, the experimental group that was subjected to adaptive learning strategies. Initially, the pretest scores for this group averaged 6.30, establishing a baseline for their academic performance. Following the implementation of the adaptive learning strategies, which included technology interventions and one-on-one tutoring, the posttest scores exhibited a substantial increase, averaging 16.80. The statistical analysis revealed a P-Value of 0.001, significantly below the 0.05 threshold, indicating that the observed improvement in scores was statistically significant and not attributable to random chance. Consequently, the null

hypothesis, which posited that there would be no significant difference in student achievement due to the adaptive learning strategies, was rejected. These results clearly demonstrated that the adaptive learning strategies had a profound and positive impact on the academic performance of kindergarten students in the experimental group. This finding underscored the potential of innovative teaching methods to significantly enhance learning outcomes, particularly in early childhood education settings, and highlighted the effectiveness of integrating technology and personalized instruction in boosting student achievement.

E. Significant Difference Between the Posttest Means Scores of the Students in Control Group and the Experimental Group

Table 6 showed the results of the computations to compare the achievements of the students between the control and experimental groups as reflected on their posttest scores.

Table 6: Comparison of the Achievement of the Students between the Control and Experimental Group

Posttest	Mean	P-Value	Remarks
Group A (Control)	11.8	0.001	significant
Group B (Experimental)	16.8		

Table 6 presented the post-intervention performance levels of students from both Group A (Control) and Group B (Experimental). Employing an independent t-test to analyze the posttest scores, the mean score for Group A was 11.8, whereas Group B achieved a higher mean of 16.80. The calculated P-Value of 0.001, which fell well below the significance threshold of 0.05, signified a statistically significant difference in academic achievement between the two groups. Consequently, the null hypothesis, suggesting no significant difference in student performance due to the intervention, was decisively rejected. These findings underscored the efficacy of the intervention—comprising traditional learning methods for Group A and adaptive strategies for Group B—in fostering improved academic outcomes among kindergarten students. The results affirmed the importance of tailored educational approaches in enhancing learning experiences and highlighted the effectiveness of adaptive learning strategies in kindergarten educational settings.

IV. DISCUSSIONS AND CONCLUSION

This chapter presented a detailed discussion of the study's results, providing an in-depth analysis of the data collected and interpreting the findings in the context of the research objectives. Additionally, it offered a comprehensive conclusion, summarizing the key insights and implications of the study, and highlighted the significance of the results in relation to the existing body of knowledge. Furthermore, this chapter outlined recommendations for future research and practical applications based on the study's outcomes.

A. Discussions

After the data were analyzed and interpreted, the following discussions of the findings were gathered:

Competency Level of the Pretest Scores of the Groups. It was observed that the students' academic performance before the intervention was very low, including class proficiency, which could be interpreted as very low performance. As indicated in class proficiency, the experimental group scored 31.5%, and the control group scored 33.5%, but both groups did not meet the expected level. A common intuition is that instruction is most effective if it considers (a) that learners are different, and (b) that they change as they learn. However, learners differ in many ways, such as in their knowledge state, interest, goals, affective state, strategic behaviors, and learning styles. To which learner differences should instruction adapt? Also, how can adaptive instruction consider that learners change continuously? Which ways of adapting are most effective?

Competency Level of the Posttest Scores of the Groups. The study showed that the experimental group achieved a Very Satisfactory level with 84% class proficiency, while the control group had 59% class proficiency and did not meet expectations. Cole, et al. (2018) investigated students' interactions with a virtual science tutor, either individually or in small groups, comprising two treatment conditions. Students were exposed to narrated multimedia science problems and explanations, followed by question-answer dialogs with the virtual tutor. Both one-on-one and small group tutoring involved the same multimedia presentations and questions posed by the virtual tutor. Overall, students reported benefiting from listening to each other and engaging in small group interactions, despite occasional disagreements with answers provided by their peers. The study concluded by envisioning a next generation of virtual science tutors capable of fostering discourse and argumentation among students in small groups, thereby enabling them to collaboratively construct accurate science explanations.

Significant difference between the mean scores of the pretest and posttest mean scores of the students in the control group. The study indicated that the pretest scores were 6.7 and the posttest scores were 11.8. Consequently, with a P-Value of 0.001, which was less than 0.05, the results were deemed significant, leading to the rejection of the null hypothesis. This provided evidence of a significant difference in student achievement when traditional learning strategies were employed in a kindergarten educational setting.

Significant difference between the mean scores of the pretest and posttest mean scores of the students in the experimental group. The means indicated that the pretest scores were 6.30 and the posttest scores were 16.80. Consequently, with a P-Value of 0.001, which was less than 0.05, the decision was to reject the null hypothesis. Therefore, the null hypothesis was rejected, indicating a significant difference between the achievements of the students when One-On-One Tutoring and Technology Integration were used in a kindergarten educational setting for the experimental group.

Significant difference between the posttest means scores of the students in the control group and the experimental group. The means indicated that Group A (Control) scored 11.8 and Group B (Experimental) scored 16.80. With a P-Value of 0.001, which was less than 0.05, the decision was made to reject the null hypothesis. Therefore, there was a significant difference between the achievements of the students in the control and experimental groups as reflected in their posttest scores.

B. Conclusion

Based on the summary provided, the study's findings indicate that the experimental group (Group B), which received technology integration and one-on-one tutoring, showed significantly higher improvement in class proficiency compared to the control group (Group A), which followed traditional learning methods. Before the intervention, both groups had similar low proficiency levels. However, after the one-month treatment period, the experimental group's posttest scores rose to a Very Satisfactory level of 84% class proficiency, while the control group only reached 59%. Statistical analysis confirmed the significance of these results, with P-Values less than 0.05 for comparisons within and between groups, leading to the rejection of the null hypothesis. This demonstrates that adaptive learning strategies, including technology and personalized tutoring, significantly enhance student achievement in Kindergarten education compared to conventional teaching methods.

C. Recommendations

➤ *Based on the Findings of This Study, Several Recommendations Can Be Made to Enhance Student Achievement in Kindergarten Education:*

- Schools should consider integrating technology interventions and one-on-one tutoring into their curriculum. The significant improvement observed in the experimental group suggests that these methods effectively enhance student learning outcomes.
- Educators should be trained in adaptive learning strategies, including the use of educational technology and personalized tutoring techniques. This training will equip teachers with the skills necessary to implement these interventions effectively.
- Educational planners and curriculum developers should incorporate adaptive learning strategies into the kindergarten curriculum. This can involve designing lesson plans that include both traditional and modern teaching methods to cater to diverse learning needs.
- Schools should invest in necessary resources such as educational technology tools and training programs for one-on-one tutoring. Ensuring that these resources are available and accessible to both teachers and students is crucial for the successful implementation of adaptive learning strategies.
- Additional studies should be conducted to explore the long-term effects of adaptive learning strategies on student performance and to identify the most effective components of these interventions. This research can help refine and improve the methods used.
- Encourage parental involvement in the educational process by providing them with information and resources on adaptive learning strategies. Engaging parents can support and reinforce the learning that occurs in the classroom.

REFERENCES

- [1]. Cole, R. A., Buchenroth-Martin, C., Weston, T. J., Devine, L., Myatt, J., Holding, B., Pradhan, S. S., McKeown, M. G., Messier, S., Borum, J., & Ward, W. H. (2018). One-on-one and small group conversations with an intelligent virtual science tutor. *Computer Speech & Language*, 50, 157–174. <https://doi.org/10.1016/j.csl.2018.01.002>
- [2]. Dixon, J., & Shen, L. (2019). Technology-Integrated curriculum and students' academic performance. In *Advances in educational technologies and instructional design book series* (pp. 96–131). <https://doi.org/10.4018/978-1-5225-5519-3.ch005>
- [3]. Fitzpatrick, C. (2017). Ready for Kindergarten: Are Intelligence Skills Enough?. *South African Journal of Childhood Education*, 7(1), 512.
- [4]. Magno, C. (2022). Planning for the learning recovery: The Philippine experience. *CLAD Asia Bulletin*, 4.

APPENDICES

PRE-TEST/POST-TEST

Grade Level: **Kindergarten**

Respondents: **Control and Experimental Group**

1. The words are **oval, orange, oven, bat**. Which of the following words **DOES NOT** belong to the group?
a. Bat b. Orange c. Oval d. Oven
2. Anna will bake the cake in the ____?
a. Basket b. Container c. Fire d. Oven
3. Which pair of words starts with the same sound?
a. Chair and clock b. Dog and door c. Hat and house d. School and slide
4. Which words share the same beginning sound?
a. Apple and banana b. Cat and car c. Flower and frog d. Pencil and playground
5. Among the options, choose the words with that have the same starting sounds.
a. Arcade and zoo b. Cinema and playground c. Gym and garden d. Museum and pool
6. Which pair of words has the same initial sound?
a. Park and library b. Playground and post office c. Museum and market d. Zoo and beach
7. How many syllables are there in the word **“hamburger”**?
a. 2 b. 3 c. 4 d. 5
8. How many syllables are there in the word **“hippopotamus”**?
a. 2 b. 3 c. 4 d. 5
9. Name an object that starts with the letter "O" and is used for writing.
a. Orthodox b. Oval Eraser c. Ovary d. Oven
10. Which object starts with the letter "O" and is used for cooking?
a. Orthodox b. Oval c. Ovary d. Oven
11. Can you name an object that starts with the letter "J" and is used for writing?
a. Jacuzzi b. Jet Lane c. Jigsaw d. Journal
12. Which habit starts with the letter "J" and is done to keep your body healthy?
a. Jacuzzi b. Jaywalking c. Jogging d. Joyriding

"Henry and Olive's Enchanting Forest Adventure"

Originally written by: Maria Gerle B. Lastimosa

Once upon a time, in a cozy little house, lived a friendly hedgehog named Henry. Henry loved to explore the lush forest near his home, filled with tall trees and colorful flowers. One sunny morning, Henry set out on an adventure, his little feet pitter-pattering along the winding paths. Along the way, he met Olive, a joyful owl perched high in a tree. Olive loved to sing sweet melodies, filling the forest with music. Together, Henry and Olive danced and played, making new friends with the creatures they met along the way. As the sun began to set, they returned home, their hearts full of happiness and memories of their wonderful day in the forest. And so, nestled in their cozy house, Henry and Olive drifted off to sleep, dreaming of their next adventure in the enchanting forest.

13. What is the name of the friendly hedgehog? _____
14. Where does Henry live? _____
15. What does Henry like to do in the forest? _____
16. What did Henry and Olive do together? _____
17. From the story, lists two words that starts with letter "Oo" _____

18. Where did Henry and Olive go at the end of the story?

19. From the story, lists two words that starts with letter “Hh” _____

20. From the story, lists two words that starts with letter “Jj” _____



Prepared by:

MARIA GERLE B. LASTIMOSA

Pretests and Posttests Scores of the Students in the Control Group

Control Group					
Pre-test			Post Test		
1	9		1	19	
2	9		2	18	
3	8		3	18	
4	8		4	13	
5	8		5	14	
6	8		6	14	
7	8		7	13	
8	8		8	12	
9	8		9	11	
10	7		10	10	
11	7		11	11	
12	6		12	10	
13	6		13	10	
14	6		14	9	
15	4		15	9	
16	4		16	8	
17	3		17	7	
18	3		18	6	

Pretests and Posttests Scores of the Students in the Experimental Group

Experimental					
Pre-test			Post Test		
1	12		1	20	
2	11		2	19	
3	11		3	20	
4	9		4	20	
5	8		5	20	
6	8		6	19	
7	8		7	20	
8	8		8	19	
9	7		9	14	
10	7		10	17	
11	6		11	15	
12	6		12	20	
13	5		13	10	
14	5		14	9	
15	5		15	16	
16	5		16	16	
17	4		17	19	
18	4		18	13	
19	4		19	15	
20	4		20	17	
21	4		21	18	
22	3		22	15	
23	2		23	16	

Competency Level of the Pretest Scores of Control and Experimental Group

Pretest	No. of students	Mean	Class Proficiency	Competency Level
GROUP A (CONTROL)	18	6.7	33.5	Did Not Meet Expectation
GROUP B (EXPERIMENTAL)	23	6.3	31.5	Did Not Meet Expectation

Competency Level of the Posttest Scores of Control and Experimental Group

Posttest	No. of students	Mean	Class Proficiency	Competency Level
Group A (Control)	18	11.8	59	Did Not Meet Expectation
Group B (Experimental)	23	16.8	84	Very Satisfactory

Comparison of the Achievement of the Students in the Group A (Control)

	Mean	P-Value	Decision
PRETEST	6.7	0.001	Significant
POSTTEST	11.8		

Comparison of the Achievement of the Students in the Experimental Group

	Mean	P-Value	Decision
PRETEST	6.3	0.001	Significant
POSTTEST	16.8		

Comparison of the Achievement of the Students between the Control and Experimental Group

Posttest	Mean	P-Value	Remarks
Group A (Control)	11.8	0.001	significant
Group B (Experimental)	16.8		

PRE-TEST/POST-TEST TABLE OF SPECIFICATION

Grade Level: Kindergarten
Experimental Group

Respondents: Control and

Question	Competencies	Domain	Level of Difficulty	Week Number	Placement of Test
The words are oval, orange, oven, bat . Which of the following words DOES NOT belong to the group?	Identify several words that begin with the same sound as the spoken word (LLKPA-Ig-7)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 1	1
Anna will bake the cake in the ____? a. Basket b. Fire c. Container d. Oven	Identify several words that begin with the same sound as the spoken word (LLKPA-Ig-7)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 1	2
Which pair of words starts with the same sound? a. School and slide b. Chair and clock c. Dog and door d. Hat and house	Identify whether or not 2 spoken words begin with the same sounds (LLKPA-Ic-2)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 2	3
Which words share the same beginning sound? a. Pencil and playground b. Apple and banana c. Cat and car d. Flower and frog	Identify whether or not 2 spoken words begin with the same sounds (LLKPA-Ic-2)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 2	4
Among the options, choose the words with that have the same starting sounds. a. Cinema and playground b. Arcade and zoo c. Museum and pool d. Gym and garden	Identify whether or not 2 spoken words begin with the same sounds (LLKPA-00-3)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 3	5
Which pair of words has the same initial sound? a. Park and library b. Playground and post office c. Museum and market d. Zoo and beach	Identify whether or not 2 spoken words begin with the same sounds (LLKPA-00-3)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 3	6
How many syllables are there in the word “ hamburger ”?	Tell the number of syllables in given spoken words (LLKPA-Ig-8)	Language, Literacy, and Communication	Easy (Remembering/ Understanding)	Week 4	7
How many syllables are there in the word “ hippopotamus ”?	Tell the number of syllables in given spoken words (LLKPA-Ig-8)	Language, Literacy, and Communication	Easy (Remembering/ Understanding)	Week 4	8

Name an object that starts with the letter "O" and is used for writing. a. Ovary b. Oven c. Oval Eraser d. Orthodox	Name objects that begin with a particular letter of the alphabet (LLKV-00-5)	Language, Literacy, and Communication	Easy (Remembering/Understanding)	Week 1	9
Which object starts with the letter "O" and is used for cooking? a. Orthodox b. Ovary c. Oval d. Oven	Name objects that begin with a particular letter of the alphabet (LLKV-00-5)	Language, Literacy, and Communication	Easy (Remembering/Understanding)	Week 1	10
Can you name an object that starts with the letter "J" and is used for writing? a. Jigsaw b. Jacuzzi c. Jet lane d. Journal	Name places and things found in the classroom, school and community (LLKV-00-8)	Language, Literacy, and Communication	Easy (Remembering/Understanding)	Week 2	11
Which habit starts with the letter "J" and is done to keep your body healthy? a. Jogging b. Jaywalking c. Joyriding d. Jacuzzi	Name places and things found in the classroom, school and community (LLKV-00-8)	Language, Literacy, and Communication	Easy (Remembering/Understanding)	Week 2	12
"Henry and Olive's Enchanting Forest Adventure" Once upon a time, in a cozy little house, lived a friendly hedgehog named Henry. Henry loved to explore the lush forest near his home, filled with tall trees and colorful flowers. One sunny morning, Henry set out on an adventure, his little feet pitter-pattering along the winding paths. Along the way, he met Olive, a joyful owl perched high in a tree. Olive loved to sing sweet melodies, filling the forest with music. Together, Henry and Olive danced and played, making new friends with the creatures they met along the way. As the sun began to set, they returned home, their hearts full of happiness and memories of their wonderful day in the forest. And so, nestled in their cozy house, Henry and Olive drifted off to sleep, dreaming of their next adventure in the enchanting forest. What is the name of the friendly hedgehog?	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 3	13

Where does Henry live?	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 3	14
What does Henry like to do in the forest?	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 4	15
What did Henry and Olive do together?	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 4	16
From the story, lists two words that starts with letter “Oo” - _____	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 1	17
Where did Henry and Olive go at the end of the story?	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Average Analyzing/ Applying	Week 2	18
From the story, lists two words that starts with letter “Hh” - _____	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Difficult (Creating/Evaluating)	Week 3	19
From the story, lists two words that starts with letter “Jj” - _____	Listen attentively to stories/ poems/ songs (LLKLC-00-1)	Language, Literacy, and Communication	Difficult (Creating/Evaluating)	Week 4	20