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The Effects of Multimedia in Teaching Reading on the English Performance of Grade One Learners

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ABSTRACT

The study utilized a pretest-posttest experimental design which focused on the effects of multimedia in teaching reading on the English performance of Grade I learners.The subjects of this study involved 28 Grade I learners in Batuan Elementary School, Calubian South District, Calubian, Leyte.Descriptive Statistics such as mean, percentage, and frequency count were used to describe the respondents' scores in the pretest, posttest, incremental scores, and quizzes. The t-test was also used to determine the differences of learners in the control and experimental groups in terms of pretest, posttest, incremental, and quizzes.
The highlights of the findings are as follows:-

The learners' performance in the pretest and posttest in the experimental group indicated a good performance compared to the control group based on their test scores.

There is a significant difference in the pretest and posttest performance in the control group with its computed t=2.00 greater than the table value of 1.706.

There is a significant difference in the pretest and posttest performance in experimental group and the scores of the two tests had a computed t=4.02 greater than the table value of 1.706.

There is a significant difference in the posttest performance between the control and experimental groups considering the t=3.8 higher than the table value 1.706.

There is a significant difference in the quiz performance between the control and the experimental groups as further evidenced by the computed t=3.1 higher than the table value of 1.706.

In conclusion, the learners highly accepted the great advantage of multimedia in teaching reading due to its gaining and positive results.

Keywords- Multimedia, Reading, English Performance

1.Introduction

Teaching reading to Grade I learners require expertise for it is new to them to face the real world of education. Sometimes, they failed to appreciate the introductory exercises for reading because most of their time was devoted for playing. But through the teachers' technique and variations of reading activities learners may divert their time more on reading than playing.

The Philippine Education for All (EFA) 2015 Plan of Action cited that attaining success in the first grade encourages children to complete elementary education as stipulated in DepEd Order No. 23, series of 2011.

This condition is supported by the findings of worldwide studies which revealed that the quality of children's preschool experiences determines their performance in the higher grades. In order to yield more EFA benefits, the Department of Education (DepEd), through the Bureau of Elementary Education shall continuously expand and intensify the Early Childhood Care and Development (ECCD) or Kindergarten education coverage to all children aged three (3) to five (5) years. This Bureau has implemented the Preschool Program since 1970; however, as of 2010, only 79 percent of the 2.4 million kindergarten children from both public and private schools had been reached.

Nowadays, educators are being challenged to adapt new approaches in teaching through the help of multimedia. Though in reality it is difficult to accept the changes and to acquire the needed skills, it is a must for educators to become competent in their quest for quality education.

It is a prevailing incidence that the low readiness level of Grade I children who are lacking in academic works and considered non-readers or frustration readers continue until Grade III.

Multimedia products are more effective in delivering message and lead to better learning and retention. As they are electronic, they can be reproduced and used to deliver information and knowledge consistently and economically to different locations and audiences, with flexible schedule, regardless of the availability of qualified teaching or extension staff.

The Multimedia approach itself is "hi-tech" but can be made very user friendly with the right equipment and software. Even inexperienced

local NGO's can develop useful multimedia products for themselves with only a small amount of training. This local product on anything from agriculture and livestock, through health problems and sanitations, to eco-tourism, gender and equity- can be collected centrally to provide a valuable pool of resources for use in telecasters, schools, colleges and other community learning/information centers. This is the approach that IMCO is starting to develop.

Salandanan (2000) supported the idea that today's children are different from the past, for they are now exposed to new and improved technology, confronted with diversified and intricate problems; and are moved forcefully by their desired for a better life.

The preceding information has stirred the researcher to conduct this study to determine the effects of multimedia in teaching reading to the English performance of Grade I learners.

2. Objectives of the Study

The present study is focused in using multimedia and its effects to the English performance of Grade I learners in Batuan Elementary School, Calubian, Leyte.

Specifically, it aims to:

1. Describe the process of employing multimedia in teaching reading to the Grade I pupils in Batuan Primary School, Calubian, Leyte.
2. Find out the performance of the pupils in terms of:
    - 2.1 pretest
    - 2.2 posttest
    - 2.3 quizzes, and
    - 2.4 incremental scores;
3. Determine the significant difference of the reading performance within the control and experimental groups in terms of their pre-test-posttest scores.
4. Determine the significant difference of the reading performance between the control and experimental groups in terms of:
    - 4.1 posttest scores,
    - 4.2 incremental scores; and
    - 4.3 quizzes ratings.
5. Highlights students' cases whose reading performance is enhanced through the benefits gained from the use of multimedia-aided instruction.

3. Methodology

This study utilized the experimental method. It is a procedure involving manipulation or control of conditions in order to study the effects of various treatments applied to members of a sample or of the same applied to members of different samples. A pretest-posttest design was employed to the pupils who were grouped and matched bases on their scores in the pretest. The two groups underwent testing procedures: pretest, posttest and quizzes.

The subject of this study involved the 28 Grade I pupils in Batuan Elementary School. These learners were matched according to their first grading grades in English. Fourteen pupils belonged to the experimental group and were exposed to multimedia in teaching reading and another 14 students belonged to the control group and were exposed to the traditional reading approach.

4. Results and Discussion

Learners' Performance in Reading. In this study, the performance of the Grade I learners were ascertained using their pretest, posttest, and quizzes.

Pretest performance. Table 1 shows the pretest performance of the control and experimental groups with the computed percentage, mean, and standard deviation.

Table 1

Pretest Performance of the Control and Experimental Groups

Control Group				Experimental Group			
Pretest Scores	**f**	**%**	**Description**	**Pretest Scores**	**f**	**%**	**Description**
21	1	7.14	Very Good	24	3	21.4	Very Good
20	3	21.4	Very Good	23	1	7.14	Very Good
19	1	7.14	Very Good	22	1	7.14	Very Good
18	1	7.14	Good	19	3	21.4	Very Good
17	1	7.14	Good	17	1	7.14	Good
16	3	21.4	Good	16	3	21.4	Good
14	1	7.14	Good	14	1	7.14	Good
13	1	7.14	Good	13	1	7.14	Good
11	1	7.14	Fair	-	-	-	-
10	1	7.14	Fair	-	-	-	-
Total	**14**	**100.0**		**Total**	**14**	**100.0**	
Mean	**16.5**			**Mean**	**19.0**		
SD	**3.5**			**SD**	**3.8**		

As presented in the preceding table, the pretest scores of the control group ranged from 10-21 where 21.4 percent obtained the scores of 16 and 20 described as "good" and "very good" respectively. Meanwhile, the experimental group's scores ranged from 13-24 where 21.4 percent obtained the scores of 16 (good), 19, and 24 (very good). The results revealed that the performance of the experimental group in the pretest is better than the control group as evidenced by the computed mean (x1=19.0; x2=16.5) respectively.

Posttest Performance. Presented in table 2 are the posttest performance of the control and experimental groups with the computed percentage, mean, and standard deviation.

Table 2

Posttest Performance of the Control and Experimental Groups

Control Group				Experimental Group			
Posttest Scores	**f**	**%**	**Description**	**Posttest Scores**	**f**	**%**	**Description**
25	1	7.14	Excellent	29	1	7.14	Excellent
23	2	14.3	Very Good	28	1	7.14	Excellent
22	1	7.14	Very Good	27	1	7.14	Excellent
21	2	14.3	Very Good	26	2	14.3	Excellent
20	1	7.14	Very Good	25	2	14.3	Excellent
19	2	14.3	Very Good	24	2	14.3	Very Good
18	1	7.14	Good	23	1	7.14	Very Good
17	2	14.3	Good	22	1	7.14	Very Good
12	2	14.3	Fair	21	1	7.14	Very Good
-	-	-	-	20	1	7.14	Very Good
-	-	-	-	18	1	7.14	Good
Total	**14**	**100.0**		**Total**	**14**	**100.0**	
Mean	**19.2**			**Mean**	**24.1**		
SD	**3.8**			**SD**	**3.1**		

As revealed in the table, the postest scores of the control group ranged from 12-25 where 14.3 percent obtained the scores of 12 (fair), 17 (good), 19, 21 and 23 described as "very good." Meanwhile, the experimental group's scores ranged from 18-19 where 14.3 percent obtained the scores of 24 (very good) as well as 25 and 25 described as "excellent."

The data revealed that the performance of the experimental group in the posttest is better than its control group counterpart as evidenced by the computed mean (x1=24.1; x2=19.2) respectively.

Quiz performance. Table 3 indicates the quiz performance of the control and experimental groups with the computed mean and standard deviation.

Table 3

Quiz Performance of the Control and Experimental Groups

Control Group		**Experimental Group**	
Quiz Scores	**f**	**Quiz Scores**	**f**
28	2	40	1
27	1	36	1
25	1	33	2
24	1	32	2
22	1	31	1
21	1	30	1
17	1	29	1
16	3	27	1
14	1	19	2
11	1	14	1
5	1	12	1
Total	**14**	**Total**	**14**
Mean	**19.4**	**Mean**	**28.2**
SD	**6.8**	**SD**	**8.03**

It can be seen from the table that the quiz scores of the control group ranged from 5-28 where three (3) obtained the score of 16 and two (2) obtained the score of 28, the highest. Meanwhile, the scores of the experimental group ranged from 12-40 where most two (2) obtained the scores of 19, 32 and 33. The data show that the experimental group's scores in quizzes are higher compared to the control as evidenced by the computed mean of (x1=28.21;x2=19.43) respectively.

Significant Difference

This section presents the hypotheses tested in the study. The t-test was used to determine the significant difference between the variables of the study.

Pretest and Posttest performance. The significant difference between the pretest and posttest performance in the control and experimental groups are presented in Tables 5 and 6.

Table 5

Difference in the Pretest and Posttest Performance of the Control Group

Control Group	**N**	**Maen**	**SD**	**t-Computation**	**Table Value**	**Decision**
Pretest	14	16.5	3.5	2.00	1.706	Ho1 Rejected Significant
Posttest	14	19.2	3.8			

Alpha level of significance=0.05 degree of freedom (df)=26

The results of the t-test analysis revealed that the pretest and posttest performance of the control group had a significant difference with (x=16.5; SD=3.5) in the pretest and (x=19.2; SD=3.8) in the posttest. The computed t-value was 2.00 which was statistically greater than the table value of 1.706 at 0.05. The hypothesis was rejected which means that there is a significant difference in the pretest and posttest performance in the control group. The results imply that the performance of the control group in the posttest is better than the pretest.

Pretest and Posttest performance. The significant difference in the pretest and posttest performance of the experimental group is presented in table 6. It also presents the computed mean, standard deviation, t-computation, table value and the decision.

Table 6

Difference in the Pretest and Posttest Performance of the Experimental Group

Experimental Group	**N**	**Mean**	**SD**	**t-computation**	**Table value**	**Decision**
Pretest	14	19.0	3.8	4.02	1.706	Ho2 Rejected Significant
Posttest	14	24.14	3.1			

Alpha level of significance=0.05 degree of freedom (df)=26

The results of the t-test analysis revealed that the pretest and posttest performance of the experimental group had a significant difference with (x=19.0; SD=3.8) and (x=24.1; SD=3.1) in the pretest and posttest respectively. The computed t was 4.02 which was statistically higher than the table value of 1.706 at 0.05. the hypothesis was rejected which means that there is a significant difference in the pretest and posttest performance of the experimental group. The results imply that the performance of the experimental group in the posttest is better than the pretest as a result of the teaching intervention.

Posttest performance. The significant difference in the posttest performance between the control and experimental groups in presented in table 7.

Table 7

Difference in the Posttest performance between the Control And Experimental groups

Variables	N	Mean	SD	t-computation	Table value	Decision
Experimental Group	14	24.1	3.1	3.8	1.706	Ho2 Rejected Significant
Control Group	14	19.2	3.8			

Alpha level of significance=0.05 degree of freedom (df)=26

The results of the t-test analysis revealed that the posttest performance between the experimental and control groups had a significant difference with (x=24.1; SD=3.1) and (x=19.2; SD=3.8) respectively. The computed t-value was 3.8 which was statistically greater that the table value of 1.706 at 0.05. The hypothesis was rejected which means that there is a significant difference in the posttest performance between the control and experimental groups. The results imply that the experimental group's performance in the posttest has increased and is better than its control group counterpart after utilizing the multimedia in teaching reading.

Quiz performance. The significant difference in the quiz performance between the control and experimental groups are presented in table 8.

Table 8

Difference in the Quiz Performance Between The Control and Experimental groups

Variables	N	Mean	SD	t-computation	Table value	Decision
Experimental Group	14	28.2	8.03	3.1	1.706	Ho2 Rejected Significant
Control Group	14	19.4	6.8			

Alpha level of significance=0.05 degree of freedom (df)=26

The results of the t-test analysis revealed that the quiz performance between the experimental and control groups had a significant difference with (x=28.2; SD=8.03) and (x=19.4; SD=6.8) respectively. The computed t-value was 3.1 which was statistically greater that the table value of 1.706 at 0.05. The hypothesis was rejected which means that there is a significant difference in the quiz performance between the control and experimental groups. The results imply that the experimental group's performance in the quizzes has increased and is better than its control group counterpart after utilizing the multimedia in teaching reading.

4. Conclusion and Recommendations

4.1 Conclusion

After a thorough analysis of the data with the aide of statistical tools, the following conclusions were drawn:

1. The pretest, posttest, and quiz performance of the pupils who were subjected to the multi-media instruction is better than their group counterpart.
2. The performance of both groups in the pretest had a significant difference in their posttest, which means that the students' learning had increased after the teaching intervention.
3. The performance of both groups in the posttest and quizzes had increase, which means that multi-media instruction really helped in the improved performance of the pupils.
4. Based on the result presented, it is safe to conclude that the pupils highly accepted the great advantage of multimedia in teaching reading due to its gaining and positive results.

4.2 Recommendations

Considering the findings and conclusion of the study, the following recommendations are hereby given:

1. School heads should examine the competencies stipulated in the Philippine Professional Standards for Teachers (PPST) especially on the part of information Communication Technology (ICT) to assure efficiency on the full implementation of multimedia teaching approach. Based on the results, they should make a plan and have a training design on the importance of automated teaching-learning approach and shall give priorities in the purchase and procurement of multimedia gadgets for an easy access of teachers in order for them to discover their skills and appreciate the latest trends in dealing learners.
2. Teachers should shake the status quo to accept changes of the modern time and should readily adapt and apply their basic skills learned from the trainings attended.
3. Close monitoring of teachers during the teaching-learning process should be observed to minimize teachers' problems which may hinder their excitement in using the gadgets.
4. Since the study was only limited to the Grade I learners of Batuan Elementary School Calubian, Leyte, it is highly recommended to conduct a follow-study in other districts or division for wider scope.

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