

PROJECT EDUCATIONAL VIDEO - ASSISTED RECIPROCAL AND STRATEGIC READING (EARES): AN INTERVENTION PROGRAM TO ADDRESS DIFFICULTIES IN WORD RECOGNITION AND COMPREHENSION AMONG GRADE 6 PUPILS

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ABSTRACT

Many learners struggle to master reading skills. Hence, this study aimed to test the effectiveness of Project EARES in addressing difficulties in word recognition and comprehension among Grade 6 learners in Tuhian Elementary School. This undertaking employed quantitative method. Meanwhile, quasi-experimental research design was utilized, specifically pretest-posttest, with a comparison group design to demonstrate causality between the intervention and an outcome. The respondents involved 40 Grade 6 learners who comprised the control and experimental groups formed through matched sampling. The reading performance of the respondents in both groups was assessed using the standardized passages from the Philippine Informal Reading Inventory (Phil-IRI) at two points of the experimental study: one was before the treatment (pretest), and the other one was after the treatment (posttest). For the analysis of the data gathered, the following statistical tools were used: mean, standard deviation, and paired sample t-test. Based on the findings, there was no significant difference between the pretest scores of controls and experimental groups before the implementation of Project EARES in terms of word recognition and comprehension. This implies that the grouping matches and there is homogeneity of group performance. On the other hand, after the implementation of the treatment, there was a significant difference between the progress of control and experimental groups regarding word recognition and comprehension. The results demonstrate a positive effect of Project EARES on addressing difficulties in reading skills. Moreover, it implies that the use of the intervention program in the treatment group is more effective than the teacher-led reading approach, which was utilized in the control group. Likewise, the utilization of Project EARES, as a reading intervention program that provides explicit instruction in metacognitive strategy within mixed-ability cooperative learning group, is a useful tool in addressing difficulties in word recognition and comprehension resulting to the improvement of reading performance.

Keywords: Project EARES, intervention program, word recognition, reading, comprehension, reading performance, experimental research design

INTRODUCTION

Effective communication requires having a good hold on various modes: reading, writing, listening, and speaking. If people would read more, they could improve their writing, listening, and even speaking. Hence, in a life of a child, reading is a significant tool to use to discover basic knowledge,

for it is a cornerstone of the foundation of lifelong learning (Gautam, 2018).

In fact, as one (1) of the five (5) macro skills, reading is an activity characterized by the translation of symbols, or letters, into words and sentences that have meaning for the individual. The ultimate goal of reading is to be able to understand written material, evaluate it, and to use it for one's needs (Chall & Stahl, 2009).

Furthermore, reading is a complex and active process that involves sensation, perception, comprehension, application, and integration, which are a basic tool for learning. As pupils read, they learn word meanings and acquire knowledge that enables them to read more challenging texts. Moreover, it provides the readers with the opportunity to engage in and practice the kind of thinking that readers do, such as asking questions, setting purposes, and making predictions (Gelzheiser et al., 2019). In the same line, written texts are intended as communication between an author and reader. For that to be accomplished, the reader must have constructed meaning with the composition, grasping ideas and information, analyzing and evaluating content for accuracy, and making connections with background knowledge and life experiences — including social, cultural, educational, and other demographics — to reach between and beyond lines in order to detect stated and implied meanings. All that it requires makes reading a cognitively complex activity. Initially, it involves decoding words, but reading also requires thinking about messages built with them (Ceprano & Shea, 2017). For this reason, reading skills are acknowledged as a major indicator of whether a learner will achieve the competence needed to achieve academic success.

In regard, reading skills refer to the ability to understand written text (Tadesse, 2018). They are a fundamental factor, a must, and a need, which will enable and improve the learners to succeed. They occupy a high place of significance in the pupils' learning and personal growth (Caper, 2015).

Some important skills to be a better reader include: comprehension, which occurs when readers think about what is being read, and use the author's words and their knowledge to construct an understanding of the text (Gelzheiser, Scanlon, Flynn, & Connors, 2019); fluency which involves accuracy, automaticity, and prosody that helps the readers see larger segments, phrases, and groups of words as a whole; and word recognition, which pertains to the ability of the reader to recognize written words properly and effortlessly (McPherson, 2015). Certainly, these reading skills are important to acquire, for the success of every learner lies in the ability to read. That is why, it is

advisable to develop them at the early age of schooling, for they are crucial to children's development, and a sheer volume of studies have demonstrated a link between competency in reading and overall attainment in school (Tadesse, 2018).

On the other hand, due to various factors, there are learners who experience difficulty mastering them. Despite all the attempts to raise the standards of reading instruction over the years, still many learners fail to achieve grade level reading when they reach the upper elementary grades. This achievement gap tends to widen during the following grades (Toste & Ciullo, 2017). This could be attributed to various factors, including background knowledge, ability, attention span, home environment, and school experiences (Anderson, 2018).

In connection with the above-mentioned statements, the researcher's analysis of the results of Philippine Informal Reading Inventory (Phil-IRI) pretest in English for the SY 2019-2020 revealed that majority of Grade 6 learners' reading performance was under the frustration level. Most of them experience difficulties in word recognition and comprehension.

Accounting to this problem, the study conducted by Delfin (2017) found out that there are different ways that can be effective remedies for reading difficulties. Teachers and learners in English can create most of these ways in the learning process. The struggling readers in school who are not receiving remediation are making little to no progress. For this reason, it is essential for them to intensely take the intervention needed. Potentially, integrating reading strategies into daily classroom routines could lead to the improvement of the pupils not only in reading, but across the curriculum. Also, their motivation is an additional factor that needs to be taken into consideration when planning for a reading instruction to support word recognition and comprehension.

With these apparent benefits that learners may get in the use of intervention program in remediating their reading difficulties to improve the reading performance, the researcher deemed the utilization of Project EARES, which is a reading intervention program characterized by a

combination of three (3) effective techniques in reading instructions.

OBJECTIVES OF THE STUDY

Primarily, this study aimed to determine the effectiveness of Project EARES in addressing difficulties in word recognition and comprehension among Grade 6 pupils in Tuhian Elementary School.

Specifically, this sought answers to the following objectives:

1. To determine the reading performance of the respondents both in control and experimental groups before and after the implementation of Project EARES in terms of word recognition and comprehension.
2. To compare the significant difference in the mean scores between the control and experimental groups before and after the implementation of Project EARES in terms of word recognition and comprehension.

METHODOLOGY

This undertaking employed quantitative method. Meanwhile, quasi- experimental research design was utilized to demonstrate causality between the intervention and an outcome. Specifically, pretest- posttest with a comparison group design was employed in order to determine the effectiveness of the treatment in addressing the difficulties in word recognition and comprehension among Grade 6 pupils in TES. Two groups were the samples of the study, which designated as control and experimental. They were observed at two points of experimentation: one was before the treatment (pretest) and the other one was after the treatment (posttest). The traditional way of teaching reading that primarily involved teacher-led reading approach was implemented in the control group. Conversely, the treatment group experienced the utilization of Project EARES in reading instruction.

The study was conducted at Tuhian Elementary School, Catanauan District II where the researcher is currently teaching. This research

locale was chosen because of the alarming results of the reading assessment conducted using Phil-IRI pretest in English in the SY 2019-2020. In regard, there were many Grade 6 learners whose reading performance under the frustration level based on the researcher's analysis of the results.

The sample of this study involved 40 Grade 6 learners who comprised the control and experimental groups formed through matched sampling. Since Grade 6 sections A and B are heterogeneous classes, after the pretest was conducted, the researcher determined whether they are matched samples through analyzing the raw scores. However, paired sample t-test was utilized which then proved that the grouping matches and there is homogeneity of group performance. In the same line, each group contained 20 respondents.

Taking ethical consideration into account, the researcher first asked the permission of the school head that the action research will be conducted. Afterwards, the researcher informed the parents of the learners who will be the respondents of this study: their private information was kept and solely used for the purpose of the given study.

Meanwhile, the researcher utilized a standardized passages from the Phil-IRI to determine the individual learner's reading performance in terms of word recognition and comprehension in both control and experimental groups. In the chosen passages, 20 questions with varying difficulty were used in the pretest and posttest. They were categorized as literal, interpretive, critical, and applied in order to measure the respondents' comprehension. Likewise, the passages were composed of 248 words. Each word that the learners read was noted and marked to identify the word recognition level.

The data collection procedure was divided into three (3) parts of the experimental study. First, the pretest was given to both groups. The respondents were asked to read the standardized passages from the Phil-IRI. Then, they were asked to answer 20 questions. Moreover, each word out of 248 words that the respondents read incorrectly was noted and marked. It was done in order to find out the pretest scores as well as for the researcher to verify that there was no significant difference

between the groups before the implementation of the program. The second part of the procedure was the utilization of Project EARES in the treatment group and a teacher-led reading approach in the control group. Finally, using the same reading tool, the respondents took the posttest in order to measure their reading achievement after the treatment was applied. Thereafter, paired sample t-test was used to determine the significant difference between the pretest and post-test scores of the control and experimental groups. For the analysis of the data gathered, the following statistical tools were employed: mean, standard deviation, and paired sample t-test.

RESULTS AND DISCUSSION

1. Reading performance of the respondents both in control and experimental groups before and after the implementation of Project EARES in terms of word recognition and comprehension.

Table 1

Reading Performance of Grade 6 Pupils based on the Pretest and Posttest Results in terms of Word Recognition

Groups	Category	Mean	Standard Deviation
Control	Pretest	158.65	32.99
	Posttest	234.90	9.20
Experimental	Pretest	158.35	32.26
	Posttest	241.80	7.70

Table 1 shows the reading performance of the respondents in the control and experimental groups before and after the implementation of Project EARES in terms of word recognition. Based on the data, there is a large difference between the mean scores of pretest and posttest in both groups. There is a mean gain of 76.25 in the control group and 83.25 in the experimental group. On the contrary, the standard deviation of scores was reduced by 23.79 and 24.56, respectively. This indicates that after the use of the intervention, the scores of the learners become more scattered as compared to the pretest scores. Furthermore, the results imply that the above-mentioned reading intervention tool addressed difficulties in word recognition. As a result, the reading performance

of the pupils has improved. The results also indicate that the traditional way of teaching reading can enhance pupils' reading achievement.

Conjointly, as illustrated in the table, the mean scores in the treatment group indicate a higher gain of 6.90 than that of the control group. For this reason, taking reading achievement into picture, the utilization of Project EARES is better than the traditional way of teaching reading.

The findings agree with the study of Delfin (2017), who found out that there are different ways that can be effective remedies for reading difficulties. Teachers and learners in English can create most of these ways in the learning process. Definitely, the struggling readers in school who are not receiving remediation are making little to no progress. Hence, it is essential for them to intensely take the intervention needed. Potentially, integrating reading strategies into daily classroom routines could lead the improvement of the learners not only in reading, but across the curriculum.

Table 2

Reading Performance of Grade 6 Pupils based on the Pretest and Posttest Results in terms of Comprehension

Groups	Category	Mean	Standard Deviation
Control	Pretest	8.45	1.50
	Posttest	15.5	1.24
Experimental	Pretest	8.35	1.76
	Posttest	17.85	1.63

The reading performance of the respondents in control and experimental groups before and after the implementation of Project EARES in terms of comprehension is shown in Table 2. As can be clearly seen, based on the results of the posttest, there is a mean gain of 7.05 in the control group and 9.5 in the experimental group. The standard deviation of scores was reduced by 0.26 and 0.13, respectively. The data demonstrate a positive effect of Project EARES in addressing difficulties in comprehension as manifested in the improvement of reading performance. Likewise, the teacher-lead reading approach utilized in the control group also improved learners' reading achievement.

However, the use of Project EARES is better than the traditional way of reading instruction.

As an instructional program, it has an overall goal of reading instruction to help pupils become an able and diversified readers, as their capabilities, the available facilities, and the instructional program permit. It is more effective to intervene early with struggling readers than it is to try to catch them after they have experienced long-term reading failure. Thus, the school must provide

appropriate, timely, intensive, and systematic intervention for those learners who need it.

2. Significant difference between the control and experimental groups before the implementation of Project EARES in terms of word recognition and comprehension

Table 3

Significant Difference between Control and Experimental Groups before the Implementation of Project EARES in terms of Word Recognition

Groups	95% Confidence Interval of the difference		Mean of the Difference	t-value	df	p-value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-1.04	1.64	0.3	0.47	19	0.65	Accept	Not Significant
Experimental								

Table 3 reveals the significant difference between the pretest scores of controls and experimental groups before the implementation of Project EARES in terms of word recognition. As

shown, there is no significant difference ($p=0.65>0.05$) between the pretest scores of both groups. One can deduce that a group performance is homogenous at the start of the experiment.

Table 4

Significant Difference between Control and Experimental Groups before the Implementation of Project EARES in terms of Comprehension

Groups	95% Confidence Interval of the difference		Mean of the Difference	t-value	df	p-value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-0.27	0.46	0.1	0.57	19	0.58	Accept	Not Significant
Experimental								

Presented in Table 4 compares the pretest scores of the control and experimental groups in terms of comprehension before implementing Project EARES. As illustrated, there is no significant difference ($p=0.58>0.05$) between scores, which shows that the groups have the same level of comprehension performance at the beginning of the experiment.

3. Significant difference between the control group before and after the implementation of Project EARES in terms of word recognition and comprehension

Table 5 discloses the significant difference between pretest and posttest scores of the control group regarding word recognition.

Table 5*Significant Difference between Control Pretest and Control Posttest in terms of Word Recognition*

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-91	-61	-83.45	-10.7	19	<0.01	Reject	Significant
Experimental								

As shown, there is a significant difference ($p < 0.01 < 0.05$) between the scores. Additionally, the mean difference, which is (-83.45) implies that the reading performance of the respondents has

improved after using teacher-led reading approach in the control group.

Table 6*Significant Difference between Control Pretest and Control Posttest in terms of Comprehension*

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-7.56	-6.54	-7.56	-28.69	19	<0.01	Reject	Significant
Experimental								

Table 6 reveals the significant difference between the pretest and posttest scores of the control group in terms of comprehension. As depicted, there is a significant difference ($p < 0.01 < 0.05$) between the two scores. Also, the average difference is -7.56, which means that the reading performance of the respondents has improved. The outcome is possibly due to a

teacher-led reading approach used in the control group.

4. Significant difference between the experimental group before and after the implementation of Project EARES in terms of word recognition and comprehension

Table 7*Significant Difference between Experimental Pretest and Experimental Posttest in terms of Word Recognition*

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-97	-69	-83.45	-12.83	19	<0.01	Reject	Significant
Experimental								

The significant difference between pretest and posttest scores in the experimental group is presented in Table 7. As shown, there is a significant difference ($p < 0.01 < 0.05$) between the scores. Meanwhile, the mean of the difference, which is -83.45 implies a marked improvement in the post-test results. Likewise, the data

demonstrate a positive effect of Project EARES as a reading intervention program utilized in the treatment group.

As an instructional program, it has an overall goal of reading instruction to help pupils become an able and diversified readers, as their capabilities, the available facilities, and the

instructional program permit. It is more effective to intervene early with struggling readers than to see them after long-term reading failure. Thus, school

must provide relevant, timely, intensive, and systematic intervention for those who need it.

Table 8

Significant Difference between Experimental Pretest and Experimental Posttest in terms of Comprehension

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-10.48	-8.52	-9.5	-20.23	19	<0.01	Reject	Significant
Experimental								

Table 8 shows the significant difference between the pretest and posttest scores in the experimental group in terms of comprehension. As illustrated in the table, there is a significant difference ($p < 0.01 < 0.05$) between the scores. Conjointly, a mean difference of -9.5 proposes that the respondents' posttest scores have improved. Results suggest that Project EARES in the treatment group is a potent tool in addressing learners' difficulties in reading performance.

The results are closely similar to the findings of the study conducted by McCown (2013) that revealed the impact of Collaborative Strategic Reading (CSR) as an intervention tool on reading

comprehension for a heterogeneous group of fourth-grade learners. In comparison to a control group, learners in the CSR classrooms made more significant gains on the Gates- MacGinitie Reading Test, particularly, on low- achieving learners.

5. Significant difference in the mean scores between the progress control and progress experimental groups before and after the implementation of Project EARES in terms of word recognition and comprehension.

Table 9

Significant Difference Between the Progress Control and Progress Experimental in Terms of Word Recognition

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-12.40	-2	-7.2	-2.9	19	0.01	Reject	Significant
Experimental								

Table 9 presents evidence of a significant difference ($p = 0.01 < 0.05$) between the control and experimental groups' progress in word recognition. In connection, the mean difference is -7.2, which indicates better reading progress in the treatment group. Indeed, it is a manifestation that the intervention addresses issues on difficulties in word recognition. Thus, Project EARES shows its effectiveness.

It was suggested that remedial reading must be conducted as early as possible to diminish learners' difficulty. Innovation and interesting reading materials should be given to encourage them to read and to love reading.

6. Significant difference in the mean scores between progress control and progress experimental in terms of comprehension

Table 10

Significant Difference Between the Progress Control and Progress Experimental in Terms of Comprehension

Groups	95% Confidence Interval of the difference		Mean of the Difference	t- value	df	p- value	Decision	Impression at 05 level of significance
	Lower	Upper						
Control	-3.47	-1.43	-2.45	-20.33	19	<0.01	Reject	Significant
Experimental								

Discloses in Table 10 is the significant difference between the progress of control and experimental groups on comprehension. The data suggest that there is a significant difference ($p < 0.01 < 0.05$) between the progress of both groups. In conjunction, the mean difference of -2.45 indicates a better reading performance in the experimental group. The results demonstrate a positive effect of Project EARES in addressing difficulties in comprehension.

The findings are in line with the study undertaken by Gani, Yusuf, and Susiani (2016), who found out that the learners who were taught reading using CSR achieved better comprehension than those who were taught using the non-CSR approach. The questionnaire results showed that more than 80 percent of the learners gave vastly positive responses concerning CSR classroom implementation responses.

Implications in the use of Project EARES as an Intervention Program

This study revealed that Project EARES is an effective reading intervention tool in addressing learners' difficulties in word recognition and comprehension. As an evidence, based on the findings, there was a significant difference between the results of pretest and posttest in the treatment group which demonstrate an improvement in the reading performance of the respondents. With this, the researcher deemed the importance of utilizing a reading program that is appropriate, timely, organized, and systematic in order to deal with problems in reading skills. In conjunction, this study can be adopted and subjected for future use.

CONCLUSIONS

Based on the findings, before the implementation of the intervention program, the

grouping matches and there is homogeneity between the control and experimental groups in terms of word recognition and comprehension. Moreover, the majority of the respondents' reading performance was under the frustration level. On the other hand, after the implementation of Project EARES, there was a marked improvement in both groups which means that the difficulties in the above-mentioned reading skills were addressed. Meanwhile, there is no significant difference between the control and experimental groups before the implementation of Project EARES in terms of word recognition and comprehension. This means that the respondents had the same reading level. Conversely, after the implementation of the treatment, there is a significant difference in the two groups which indicates that the intervention program is effective in improving reading performance. Indeed, the use of Project EARES as a reading intervention program that provides explicit instruction in metacognitive strategy within mixed-ability cooperative learning group is an effective tool in addressing difficulties in word recognition and comprehension which can result to the improvement of reading performance.

RECOMMENDATIONS

In the light of the findings and conclusions, the researcher offers the following recommendations: (a) learners who experience difficulties in reading skills must be provided with an intervention program which is timely, appropriate, organized, and systematic; (b) Teachers may consider the utilization of Project EARES as an intervention program in order to improve learners' reading performance in terms of word recognition and comprehension; and (c) future researchers may examine which elements of Project EARES are more beneficial and whether there are elements that can be enhanced in ways

to demonstrate more effective impact for all learners.

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