

UTILIZING COGNITIVE ACADEMIC LANGUAGE LEARNING APPROACH (CALLA) FOR TEACHING READING COMPREHENSION

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Abstract

This study aims to explain reading comprehension and analyze the effectiveness of the CALLA technique in teaching reading comprehension. The researchers used quantitative with quasi-experimental research design. The population of this study consisted all of eighth grade of SMP N 31 Purworejo in the academic year 2022/2023 with total 187 students. The samples were collected from two classrooms, those are VIII E as the experimental class and VIII F as the control class. Both classes had a total of 62 students. After analyzing the data, it found that the mean score of the experimental group is higher than the mean score of control group (76,94>69,20). In addition, the result of independent sample test the t-value is 3.246 with sig. 0,002 which is lower than the critical value $0,002 < 0,05$. It meant that the alternative hypothesis (H_a) was accepted. It means that using CALLA is effective for teaching reading comprehension at the eighth grade students of SMPN 31 Purworejo in the academic year of 2022/2023.

Keywords: Effectiveness, CALLA, teaching, reading comprehension.

1 INTRODUCTION

English is an international language and nowadays English is very important for communication. It says so because it is one of the most spoken languages in the world. In learning English, there are four basic language skills required namely listening, speaking, reading, and writing. To succeed academically, students must learn how to communicate, listen, read, and write in English. In this study, the researcher is interested in reading skills, particularly reading comprehension. In this study, the researcher is interested in reading skills, particularly reading comprehension. The ability of students to comprehend the concepts or ideas in the text is known as reading comprehension. Reading becomes more enjoyable and useful when one has good reading comprehension abilities.

Reading becomes more enjoyable and useful when one has good reading comprehension abilities. Also, it is crucial for enhancing knowledge in all subjects, especially in English teaching. Reading comprehension, according to [1] " the process of reading begins with vision, proceeds with information reception based on perception, and ends with understanding in the brain. "It could be argued that reading comprehension is a crucial talent that all students should acquire since it allows them to swiftly comprehend the main idea of a text. However, most students experience confusion in their four English skills, especially in reading. For example, they have difficulties in understanding reading tests, especially those related to understanding the main conception of the text, conceptualizing words, identifying word references, explicitly stated information, and implicitly stated information as it has been stated before by previous study.

In light of the above issues, educators should enhance their teaching methods by implementing strategies that can boost students' interest in reading. The researcher assumed in this situation must employ efficient teaching strategies that can improve students' reading abilities as well as their happiness and enjoyment for reading. The CALLA learning model has three strategies in it, namely cognitive, metacognitive and social strategies. The CALLA learning model with local wisdom is effectively applied in teaching reading comprehension seen from the strong desire and active involvement of students in learning [2]. Technique will increase student interest and help them become skilled readers.

2 METHODOLOGY

A quantitative approach with a quasi-experimental design was employed in this research. The research was held from February 07th until March 02nd 2023. The subjects of this study were SMP Negeri 31 Purworejo eighth grade students in the academic year 2022/2023, this includes seven classes with an overall population of 127 students. According to Arikunto [20] defines population as the total number of participants in the research. The samples were collected from two classrooms, those are VIII E as the experimental class and VIII F as the control class. Both classes had a total of 62 students. According to Sugiyono [21] argued that the sample was a part of the population as a whole. Purposive sampling is used by the researcher to collect the sample. The researcher utilizes a test to collecting the data.

According to [20] tests may take the form of multiple choice questions, matching, completing, short answers, or essays. In this research, the type of the test was multiple choice because the researcher wants to know the students' comprehension in reading. The test's subject matter is reading comprehension. The researcher takes two multiple-choice assessments, a pretest and a posttest, each consisting of 25 questions.

In this research, the researchers employed the two types of analysis in their study, namely descriptive analysis and inferential analysis. According to [22], An objective of a descriptive analysis is to describe or offer a description of the observed item by a data sample or population without doing an analysis or getting conclusions. Descriptive statistics include measurement of central symptoms tendency (mean, median, mode) and measurement of variation group (range, variance, and standard deviation). In measuring descriptive statistics, the researcher use SPSS version 25. According to [23] SPSS is a data processing tool that can handle data rapidly and accurately. Additionally, the inferential analysis in this study includes techniques for testing hypotheses through a discussion of homogeneity, normality, and the independent sample test.

3 FINDING AND DISCUSSION

This section presents the findings of this study. The researchers took two classes of the eighth grade students. There were 62 students in total. The researcher managed the pre-test in class VIII E on February 08th 2023, and in class VIII F on February 09th 2023. The treatment was conducted on February 13th until 27th 2023 and the post-test was conducted March 02nd 2023. The results of students' reading habits and reading comprehension skills of the experimental group and control group can be categorized as the following table:

Table 1. Classification on the Students' Score in Pre-test and Post-Test Experimental Group

Value	Level of Achievement	Pre Test		Post Test	
		Frequency	Percentage	Frequency	Percentage
80-100	Excellent	0	0%	13	41%
66-79	Good	5	16%	15	47%
56-65	Sufficient	14	44%	4	13%
40-55	Fairly Sufficient	13	41%	0	0%
<39	Poor	0	0%	0	0%
Total		32	100%	32	100%

The table 1 above shows the result of the experimental group's pre- and post-tests on students' English reading comprehension. In the pre-test for the experimental group, no students (0%) who fell into the excellent category, 5 students (16%) who fell into the good category, 14 students (44%) who fell into the sufficient category, 13 students (41%) who fell into the fairly sufficient category, and no students (0%) who fell into the poor category. In the post-test. 13 students (41%) who fell into the excellent category, 15 students (47%) who fell into the good category, 4 students (13%) who fell into

the sufficient category, and no student (0%) who fell into the fairly sufficient I category, and no students (0%) who fell into the low category.

Table 2. Classification on the Students' Score in Pre-test and Post-Test of the Control Group

Value	Level of Achievement	Pre Test		Post Test	
		Frequency	Percentage	Frequency	Percentage
80-100	Excellent	0	0%	5	17%
66-79	Good	2	7%	13	43%
56-65	Sufficient	13	43%	8	27%
40-55	Fairly Sufficient	14	47%	4	13%
<39	Poor	1	3%	0	0%
Total		30	100%	30	100%

Table 2 above, it showed the result of students' English reading comprehension pre- test and post-test done by the control group. In control group pre-test, no students (0%) who fell into the excellent category, two students (7%) who fell into the good category, 13 students (43%) who fell into the sufficient category, 14 students (47%) who fell into the fairly sufficient category, and 1 student (3 %) who fell into the poor category. In the post-test. 5 students (17%) who belonged to excellent category, 13 students (43%) who fell into the good category, 8 students (27%) who fell into the sufficient category, five students (13%) to fairly sufficient category, and no students (0 %) who fell into the low category.

2.1 Descriptive Analysis

The result of the descriptive analysis of the calculation of the SPSS can be seen as the following table:

Table 3. The Result of Descriptive Statistic

Descriptive Statistics											
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance	Median	Mode	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Statistic
PreTestExperiment	32	36	40	76	1810	56.75	1,442	8,156	66,516	56	52
PostTestExperiment	32	36	60	96	2462	76.94	1,573	8,901	79,222	76	76
PreTestCtrl	30	32	36	68	1576	52.53	1,590	8,709	75,844	54	56
PostTestCtrl	30	36	52	88	2076	69.20	1,790	9,806	96,166	70	76
Valid N (listwise)	30										

Based on table. 3 the descriptive analysis is summarized by comparing the findings of the experimental and control groups. This table illustrates the highest and lowest scores, as well as the range, median, mode, mean, and standard deviation both of the classes.

The mean pre-test score for the experimental group was 56.75, while their mean post-test score was 76.94. The median pre-test was 56, and it was 76 post-tests. 52 were used for the pre-test and 76 for the post-test. However, the pre-test standard deviation was 8.156 and the post-test

standard deviation was 8.901. Variances pre-test were 66.516 and post-test were 79.222. Furthermore, the pre-test and post-test ranges were both 36. The mean pre-test score for the control group was 52, 53, and the mean post-test score was 69, 20; the post-test median was 70. 56 was the pre-test mode, and 76 was the post-test mode. The standard deviation pre-test was 8,709, while the standard deviation post-test was 9,806. The variation pre-test was 75,844, while the variation post-test was 96,166. Additionally, the pre-test and post-test ranges were 32 and 36.

2.2 Inferential Analysis

The following table shows how the descriptive analysis of the SPSS calculation was calculated.

Table 4. Test of Normality Kolmogorov-Smirnov

Tests of Normality							
Kelas		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ScoreTest	Pre Test Experiment	0,130	32	0,180	0,969	32	0,472
	Post Test Experiment	0,114	32	.200 [*]	0,968	32	0,452
	Pre Test Control	0,155	30	0,065	0,956	30	0,245
	Post Test Control	0,156	30	0,060	0,958	30	0,281
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

Based on the computation of the table, the computation revealed in the Kolmogorov-Smirnov table that the experimental group's pre-test and post-test had significant values of 0,180 and 0,200, specifically for the pre-test and post-test, respectively. The control group's pre-test and post-test had significance values of 0,65 and 0,60, respectively. The experimental group's significance values exceeded 0,05, as did those of the control group. The experimental and control groups' pre- and post-test data distributions may be inferred to be normal.

Table 5. Test of homogeneity

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
ScoreTest	Based on Mean	0,880	3	120	0,453
	Based on Median	0,935	3	120	0,426
	Based on Median and with adjusted df	0,974	3	118,847	0,426
	Based on trimmed mean	0,943	3	120	0,445

The result from the first computation above is 0,453, which is compounded using the T-table value of 3 for the numerator and 120 for the dominator. The T-table table reveals that the T-value is significant at level 0,05. It shows that the T-value value is higher than the T-table value (0,453>0,05). This indicates that the variance of two score is homogenous.

Table 6. The Independent Samples Test

Independent Samples Test										
		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the	
									Lower	Upper
PostTestE xperiment	Equal variances assumed	1,095	0,300	3,257	60	0,002	7,738	2,376	2,985	12,490
	Equal variances not assumed			3,246	58,468	0,002	7,738	2,384	2,967	12,508

Based on the table, the calculation of SPSS shows the t-value is 3.246 with sig. 0,002 which is lower than the critical value $0,002 < 0,05$. According to Field (2009:575), if the Sig. (2- tailed) is less than 0,05, the data is significantly different. As a result, the alternative hypothesis (H_a) is accepted. Therefore, the researcher concludes that using CALLA is effective for teaching reading comprehension of the eighth grade students in the academic year of 2022/2023.

4 CONCLUSIONS

Based on the research result findings that have already been described, it can be said that CALLA is successful in teaching reading comprehension to eighth-graders. The experimental group's and the control group's mean scores show this. It shows that based on the mean score of experimental group and control group. The mean score of post-test in experimental group is 76,94 and in control group is 69,20. It means that the mean score of post-test in experimental group is higher than in the control group (76,94>69,20). In addition, the computation of the independent sample t-test shows the t-value is 3.246 with sig. 0,002 which is lower than the critical values Sig. (2- tailed) is $0,002 < 0,05$. It means that CALLA can be effectively for teaching reading comprehension of the eighth grade students in the academic year of 2022/2023.

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