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The Application of Think-Pair-Share and Reciprocal Teaching Strategy on Improving Reading Comprehension of the Tenth Grade Vocational School Students

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Abstract

This research aims to investigate the effects of Think-Pair-Share and Reciprocal techniques, subsequently comparing the results of both strategies among tenth-grade students at SMK PGRI 31 Legok. This study employs a quantitative methodology utilising a quasi-experimental design. The research population consists of tenth-grade pupils, totalling 355 individuals. The researcher employed purposive sampling to select a sample of 108 students, comprising 36 students from each of the three classes. There are three classes: X MP 1, the experimental class taught using the Think-Pair-Share method; X MP, the experimental class utilising the Reciprocal Teaching Strategy; and X MP 3, the control class instructed through the Conventional Teaching Strategy. The results indicated that the students' reading comprehension scores, following instruction using the specified techniques, were favourable, as evidenced by a mean posttest score of 68.94 for the Think-Pair-Share method and 71.81 for the Reciprocal Teaching Strategy. The mean posttest score in reading comprehension for students taught using the Reciprocal Teaching Strategy is higher than that of students taught by a different method. The Reciprocal Teaching Strategy is more effective than Think-Pair-Share in enhancing students' reading comprehension. This suggests that vocational schoolteachers ought to integrate these tactics into their reading sessions to promote a more dynamic and student-centered learning atmosphere.

Keywords: *Think-Pair-Share, Reciprocal Teaching, Reading Comprehension, cooperative learning.*

INTRODUCTION

English is one of the languages most commonly employed for worldwide communication. Khalaji & Vafaeeseresht (2012:135) assert that English is presently regarded as an international language due to its extensive use across many domains, including trade, education, economics, and the internet. As English is regarded as a secondary language following the national languages, numerous individuals in Indonesia aspire to get proficiency in it as their foreign language. They recognise that the English language has become increasingly vital for future communication and is intrinsically linked to the period of globalisation. Language instruction encompasses four skills: speaking, writing, listening, and reading. Reading is an interaction process between the reader and the text that

leads to comprehension. Numerous factors contribute to its significance. Primarily, pupils frequently engage in reading as part of their daily routines. Secondly, students utilise reading for academic purposes during the learning process.

Reading is beneficial for various objectives, including career advancement, academic pursuits, and leisure activities. Reading not only encompasses various abilities and linguistic elements but also expands knowledge to acquire further information. Numerous kids encounter difficulties in reading activities, as attaining comprehension in reading is challenging. Many EFL learners struggle to comprehend their reading material and are unaware of strategies to enhance their reading skills. Data from pupils at SMK PGRI 31 Legok indicates that many experience frustration when encountering challenges in reading the target language.

The interview results of the English teacher instructing those classes, as supported by Westwood (2001:26), may be attributed to various factors, including the learner or the learner's background, the pedagogical approach, the learning environment, and potentially the dynamics of the teacher-student relationship.

The aforementioned phrase pertains to kids' challenges in reading comprehension. The teacher has to employ specific approaches to address the issues and enhance student knowledge. The researcher employed the cooperative learning technique to enhance students' reading comprehension. Khan (2011:211) asserts that cooperative learning is a strategy employed by educators to facilitate the development of essential social skills in students.

The researcher employs two cooperative learning strategies to be implemented in education, particularly in reading comprehension. These are referred to as the Think-Pair-Share Strategy and the Reciprocal Teaching Strategy. The researcher choose to undertake an experimental study to examine the substantial impact of the Think-Pair-Share and Reciprocal Teaching strategies on enhancing students' reading comprehension. This investigation will be conducted by the researcher in the tenth grade at SMK PGRI 31 Legok-Tangerang. The researcher will employ three classes: classes A and B as the experimental groups utilising the Think-Pair-Share and Reciprocal Teaching strategies, and class C as the control group instructed via conventional methods.

The researcher anticipates that the implementation of the Think-Pair-Share and Reciprocal Teaching strategies in English instruction will enhance students' reading comprehension. Pang and Bernhardt (2003:6) assert that reading comprehension involves extracting meaning from cohesive text. It encompasses lexical knowledge (vocabulary) alongside cognitive and analytical reasoning. Consequently, comprehension is an active rather than a passive process. The reader actively interacts with the text to derive meaning. This active engagement entails utilising prior knowledge. It entails deducing conclusions from the vocabulary and phrases employed by a writer to convey information, concepts, and perspectives. Reading comprehension, according to Gayo et al. (2016:1), is the ability to infer and

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create meaning from written language, requiring a substantial interaction between the reader and the text's characteristics. Based on the comment, the author concluded that reading comprehension is the process by which the reader tries to understand the text's main idea.

Both strategies involve cooperative learning. The definition of cooperative learning of states by Marzban & Alinejad (2014:3744) Cooperative Learning techniques require a facilitator who shifts increased responsibility for information acquisition, organisation, and application from the teacher to the student.

McGroarty (2013:127) defines the benefits of cooperative learning. Cooperative learning, shown by small group activities, provides enough possibilities for genuine second language practice and meaning negotiation through discourse. Secondly, cooperative learning can aid students in leveraging primary language resources while developing second language proficiency. Third, in both ESL and bilingual environments, cooperative learning offers additional strategies to incorporate content areas into language instruction.

Cooper (2018:1) states that Think Pair Share is a pedagogical exercise initially proposed by Lyman (1981) for application in Special Education contexts. Since that time, it has gained popularity and is utilized in numerous higher education environments. Sumarsih & Sanjaya (2013:109) delineate six steps in the Think-Pair-Share strategy. Initially, the teacher arranges the pupils into teams of four, selecting them based on their attendance numbers or through random selection. Secondly, the instructor provides a paper sheet with the material and its corresponding questions. Third, the instructor allocates a minimum of 10 seconds for students to formulate their responses independently. The teacher instructs the pupils to collaborate with their partners to deliberate on the issue and respond to the questions. Ultimately, select a few students at random to present their ideas to the class. Think, Pair, Share facilitates students' conceptual comprehension of a subject, enhances their capacity to evaluate information and formulate conclusions, and cultivates their ability to contemplate alternative perspectives. Collins & Collins (2002:77) define reciprocal teaching as a systematic method for teaching comprehension, wherein teachers and students engage in discourse that facilitates the students' construction of meaning. Pilten (2016:232) asserts that the reciprocal teaching technique comprises four interconnected steps, with questioning emphasized throughout to enhance reading comprehension.

The data collection process will span two months. This research involved a population of 356 tenth-grade students, from whom the researcher selected three classrooms with balanced student numbers as the sample. Two classes comprise the experimental group: X MP 1 and X MP 3. A single control class from X MP 3 will be selected by the researcher to serve as an example for demonstrating their understanding of a portion or the entirety of the text. and substantiating concepts. Students formulate forecasts. The discussion pertains to potential occurrences within the text, utilizing prior information and experiences. The subsequent stage of clarifying

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pertains to students conducting a critical assessment of their reading material. In the last step, termed questioning, students are prompted to recall essential material and concentrate on the central theme of the text by generating their own enquiries on it. In the concluding phase, summarization, students are required to articulate their understanding of a section or the entirety of the text.

RESEARCH METHODOLOGY

This study was performed at SMK PGRI 31 Legok Tangerang. The research focused on tenth-grade pupils at SMK PGRI 31 Legok. The author selects this school due to issues in the tenth grade, where reading scores fell below the required standards.

Table 1.1. Research design

Class	Test	Treatments			Test
		X1	X2	X3	
Control class	Pre-test 01a	√	√	√	Post-test 01b
Experiment class	Pre-test 02a	√	√	√	Post-test 02b

Multiple-choice evaluations will be utilized to measure students' reading comprehension levels. Approximately 30 questions are provided, each with options A, B, C, D, and E. The author will analyze the effectiveness and influence of the Think-Pair-Share Strategy and Reciprocal Teaching Strategy on improving students' reading comprehension. The evaluations will be conducted as pre-tests and post-tests utilizing multiple-choice questions. The researcher will utilize this strategy to obtain the essential primary data required for assessing the research hypothesis.

Assessment of Validity and Reliability

The final instrument employed a sample of 36 learners from a population of 108 students. This study utilized 30 multiple-choice questions to evaluate reading comprehension, subsequently conducting validity and reliability assessments.

The assessment consists of 30 multiple-choice questions centered on reading comprehension of descriptive passages. The author performed a validity test, indicating that there are 30 valid items in the reading comprehension assessment.

This research utilized a government-validated national examination test, which was also affirmed by the teacher as suitable for tenth-grade students. The researcher did not do the validation repeatedly.

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Table 2. The Reading Comprehension Instrument

Indicator	The number of test
Identifying the main idea of descriptive text	5
Identifying the general idea of descriptive text	1,19,20,9,15,16,17,18,19,20
Identifying specific information	3,8,14,23,24,26,28,30
Identifying objective information	2,4,6,7,10,11,13,22,25,27
Identifying on descriptive theoretical	12,29

Assessing Data Normality

The objective of a normality test is to determine if each sample follows a normal distribution. The normality test can be conducted using various methods, one of which is the Lilliefors test. The normality test is conducted via the Liliefors formula with the following criteria: Acceptance occurs if Lcount is less than Ltable. The data distribution is normal. Ho is refused if Lcount exceeds Ltable. The data distribution is non-normal.

Evaluating Data Homogeneity

A homogeneity test was undertaken to determine whether the samples are from populations with identical distributions. This study will employ the F-test. There exist two categories of data: experimental and control. The data will be deemed homogenous if the value of f_{count} is less than f_{table} at the critical level of 0.05. The formula is as follows:

Fcount = (maximum variance) / (minimum variance)

Criteria employed for research: H0 is permitted if Fcount is less than Ftable. H0 is rejected if Fcount exceeds Ftable.

RESEARCH FINDINGS AND DISCUSSION

The statistical analysis conducted with SPSS 23 for the experimental group utilising the Think-Pair-Share Strategy reveals a pretest mean of 46.22 and a posttest mean of 68.94, yielding a mean difference of 37. In the experimental class of TPS, the pretest minimum value is 23, the maximum value is 63, and the standard deviation is 9.547. The minimum posttest score is 46, the maximum is 83, and the standard deviation is 9.071.

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Table 3. The Descriptive Data of Think-Pair-Share Strategy

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Pretest_TPS	36	23	63	46.22	9.547	91.149
Posttest_TPS	36	46	83	68.94	9.071	82.283
Different_Value	36	11	37	22.72	6.683	44.663
Valid N (listwise)	36					

Table 4. The Descriptive Data of Reciprocal teaching strategy

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Pretest_Reciprocal	36	30	66	43.81	9.489	90.047
Posttest_Reciprocal	36	53	86	71.81	9.498	90.218
Different_Value	36	12	43	28.00	7.399	54.743
Valid N (listwise)	36					

The statistical analysis using SPSS 23 for the experimental class employing reciprocal teaching reveals a pretest mean of 43.81 and a posttest mean of 71.81, resulting in a mean difference of 28.00 between the pretest and posttest scores. The experimental class of reciprocal instruction exhibits a minimum pretest score of 30 and a maximum score of 66, with a standard deviation of 9.489. The minimum posttest value is 53, the maximum is 86, and the standard deviation is 9.498.

Table 5. The Descriptive Data of Conventional teaching

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Pretest_Conventional	36	23	63	41.83	9.563	91.457
Posttest_Conventional	36	43	76	61.22	9.240	85.378
Different_Value	36	7	34	19.39	7.028	49.387
Valid N (listwise)	36					

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The SPSS 23 statistical analysis of the control class indicates a pretest mean of 41.83 and a posttest mean of 61.22, resulting in a mean difference of 19.39 between the pretest and posttest scores. In the controlled class, the minimum pretest score is 23, the maximum score is 63, and the standard deviation is 9.563. The posttest has a minimum value of 43, a maximum value of 76, and a standard deviation of 7.028.

The Analysis of the Data

Normality Test

Table 6. Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Experiment_TPS	.130	36	.127	.967	36	.352
Experiment_reciprocal	.134	36	.099	.957	36	.170
Conventional	.118	36	.200*	.973	36	.509

Table of Normality Tests, utilising a 95% confidence interval, with α established at 5%. If the significance value (Sig) surpasses α, the distribution is deemed normal.

The table reveals that the statistical significance for the Experimental class utilising the TPS approach is 0.127, for the Experimental class employing reciprocal instruction is 0.99, and for the Control class using the traditional strategy is 0.200. All significance values from the three classes exceeded 0.05. The learning outcomes from the data of three classes employing Think-Pair-Share, Reciprocal, and conventional techniques are consistently distributed.

Homogeneity Test

Table 7. Test of Homogeneity

Levene Statistic	df1	df2	Sig.
.014	2	105	.986

If the significance is less than 0.05, the data group variant is not same. If the significance is more than 0.05, then the data group variant is homogeneous. According to the table above, the significant value exceeds 0.05 (0.986 > 0.05), indicating that the population variance is homogeneous. The data values of the control and experimental classes are homogeneous.

Testing of Hypothesis

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Table 8. Think-Pair-Share and Conventional Teaching Strategy

Independent Samples Test

Assumption	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.074	.786	2.062	70	.043	3.333	1.616	.110	6.557
Equal variances not assumed			2.062	69.824	.043	3.333	1.616	.110	6.557

The table above presents the results from the experimental class instructed using the Think-Pair-Share method versus the controlled class taught with traditional strategies. The hypothesis test yielded a t-value of 2.062. The t-table indicates that for a two-tailed test with degrees of freedom (df) equal to 70, the value is 1.994. The value of t_count exceeds t_table (2.062 > 1.994), leading to the conclusion that the null hypothesis (Ho) is rejected, indicating a significant difference between the experimental class taught using the Think-Pair-Share method and the control class taught using conventional strategy.

Table 9. Reciprocal Teaching Strategy and Conventional Teaching Strategy

Independent Samples Test

Assumption	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.124	.726	5.063	70	.000	8.611	1.701	5.219	12.003
Equal variances not assumed			5.063	69.815	.000	8.611	1.701	5.219	12.003

The table above displays the outcomes of the experimental group educated with the Reciprocal Teaching Strategy and the control group instructed with the traditional strategy. The hypothesis test produced a t-value of 5.063. The t-table shows that for two-tailed

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degrees of freedom (df) of 70, the value is 1.994. The t_count value surpasses t_table (5.063 > 1.994), resulting in the rejection of the null hypothesis (Ho), which signifies a substantial difference between the experimental class instructed using the Think-Pair-Share approach and the control class taught with standard strategies.

Table.10 Think-Pair-Share, Reciprocal, and conventional Strategies.

Test Statistics

	Value
Chi-Square	20.322
Df	2
Asymp. Sig.	0

The table above displays the results from experimental class 1, which utilised the Think-Pair-Share methodology, the experimental class employing the reciprocal teaching strategy, and the control class taught by traditional techniques. The results demonstrated that the Asymptotic significance (2-tailed) is below 0.05 (0.000 < 0.05). The null hypothesis is rejected, signifying a significant difference among the reading comprehension education methods: Think-Pair-Share, Reciprocal Teaching, and traditional approaches.

Table 11. Think-Pair-Share Strategy and Reciprocal Teaching Strategy

Independent Samples Test

Assumption	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.395	.532	-3.176	70	.002	-5.278	1.662	-8.592	-1.964
Equal variances not assumed			-3.176	69.288	.002	-5.278	1.662	-8.593	-1.963

The table above displays the outcomes of an experimental class conducted using Think-Pair-Share and Reciprocal Teaching methodologies. The hypothesis test produced a t-value of 3.176. The t-table shows that for a two-tailed test with 70 degrees of freedom, the critical value is 1.994. The t_count value surpasses t_table (3.176 >

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1.994), signifying a substantial disparity in reading comprehension instruction between the TPS and Reciprocal approaches. The researcher has computed the varying mean values of Think-Pair-Share and Reciprocal Teaching strategies to ascertain which method is more helpful in improving students' reading comprehension. The result ensued:

Table 12. TPS and RT Means

Class	Mean	Std. Deviation	Std. Error Mean
TPS	22.72	6.683	1.114
reciprocal	28	7.399	1.233

The table indicates that the mean of TPS is 22.79, whereas the mean of Reciprocal is 28.00 (22.79 < 28.00), concluding that the mean value of Reciprocal exceeds that of TPS. The finding is that the Reciprocal Teaching Strategy is more effective in enhancing students' reading comprehension.

CONCLUSION

Based on the findings and discussions in the previous chapter, the author seeks to summarise the results of this research. The application of Think-Pair-Share in teaching descriptive text improves students' understanding of the reading content and fosters collaborative learning, as they are required to participate in group activity during the educational process. The application of the Reciprocal Teaching method improves pupils' reading comprehension. This method also produces a positive effect on collaborative learning and promotes more student autonomy.

According to the problem formulation, research objective, hypothesis testing, and analytical findings, it can be concluded that a considerable difference exists between the Think-Pair-Share (TPS) approach and the Reciprocal Teaching technique in teaching reading. The findings revealed a notable disparity in the efficacy of the Think-Pair-Share (TPS) technique compared to the Reciprocal Teaching strategy in improving reading comprehension among tenth-grade students at SMK PGRI 31 Legok Tangerang. The researcher computed the mean values of Think-Pair-Share (TPS) and Reciprocal Teaching to ascertain the most effective strategy. The findings demonstrated that the average value of the Reciprocal Teaching technique exceeded that of the Think-Pair-Share method. The application of the Think-Pair-Share (TPS) and Reciprocal Teaching techniques effectively improved students' reading comprehension; however, the Reciprocal Teaching method demonstrated superior efficacy compared to the Think-Pair-Share strategy.

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