

THE EFFECT ON METACOGNITIVE STRATEGY OF STUDENTS' READING ABILITY OF DESCRIPTIVE TEXT

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ABSTRACT

Reading ability is an important skill in learning English, but many students still face difficulties in understanding descriptive texts. This study aimed to examine the effect of Metacognitive Strategy on students' reading ability of descriptive text at the eleventh grade of SMKN 1 Kelayang. The research used a quantitative method with a true experimental design consisting of pre-test and post-test control groups. The sample consisted of an experimental class and a control class. Data were collected through reading tests and analyzed using SPSS. The findings showed that the experimental class achieved a higher post-test mean score (84.53) than the control class (76.82). The result of the independent sample t-test indicated that the significance value was lower than 0.05, which means that Metacognitive Strategy had a significant effect on students' reading ability. In conclusion, Metacognitive Strategy is effective in improving students' reading ability and encouraging active learning.

Keywords: *Metacognitive strategy, reading ability, descriptive text, reading comprehension, EFL students*

INTRODUCTION

Reading is one of the essential skills in learning English as a foreign language because it enables students to access information, develop knowledge, and improve other language skills. Reading is not merely recognizing written symbols, but also an active process of constructing meaning through interaction between the reader and the text. Reading ability constitutes a fundamental competence in English as a Foreign Language (EFL) learning, as it enables learners to access information, construct knowledge, and support the development of other language skills. Beyond the basic recognition of written symbols, reading ability involves complex cognitive processes, including identifying main ideas, locating specific information, interpreting vocabulary in context, recognizing referential relationships, and

generating inferences. As argued by Nunan (2003), reading is an interactive process in which readers integrate textual information with their prior knowledge to construct meaning. Similarly, Grabe and Stoller (2019) emphasize that reading encompasses both lower-level processes (e.g., lexical access and syntactic parsing) and higher-level processes (e.g., inference-making and critical interpretation). Consequently, reading ability plays a pivotal role in determining students' academic success.

Despite its importance, a substantial body of evidence indicates that many EFL learners continue to experience difficulties in developing adequate reading ability. Empirical observations in the context of SMKN 1 Kelayang reveal persistent challenges, including limited vocabulary mastery, difficulties in identifying main ideas, and an inability to extract detailed information from texts. These challenges extend to more complex aspects of reading, such as interpreting word references and drawing inferences. Nation (2015) asserts that vocabulary knowledge is a strong predictor of reading comprehension, as insufficient lexical resources constrain learners' ability to process textual meaning effectively. Furthermore, prevailing instructional practices in many classrooms remain predominantly teacher-centered, which often positions students as passive recipients of knowledge rather than active constructors of meaning. Freire (2018) critiques such approaches as limiting learners' critical engagement and autonomy, thereby hindering the development of higher-order reading skills.

Within the secondary education curriculum, students are required to comprehend various genres, including descriptive texts. Descriptive texts are designed to represent objects, individuals, or places through detailed and structured information, enabling readers to form vivid mental representations. Hyland (2016) explains that descriptive texts emphasize factual representation through the use of attributes and sensory details, while Knapp and Watkins (2018) highlight their generic structure, consisting of identification and description. Effective comprehension of such texts requires not only surface-level understanding but also deeper cognitive engagement, including the ability to identify key information,

interpret linguistic features, and construct coherent meaning. Therefore, students' reading ability is crucial for successful engagement with descriptive texts.

However, the findings from preliminary observations at SMKN 1 Kelayang suggest that students' reading ability in descriptive texts remains suboptimal. Students demonstrate difficulties in identifying main ideas, locating specific information, and understanding contextual vocabulary. In addition, they struggle to interpret referential relationships and generate appropriate inferences. More importantly, students tend to exhibit passive reading behaviors and lack the ability to regulate their own comprehension processes. This condition indicates a deficiency in metacognitive awareness, which is essential for effective reading.

Metacognitive awareness refers to learners' knowledge and regulation of their own cognitive processes, particularly in planning, monitoring, and evaluating their learning activities. Livingston (2016) argues that learners with higher levels of metacognitive awareness are more capable of selecting and applying appropriate strategies to enhance their learning outcomes. In the context of reading, metacognitive awareness enables learners to actively monitor their comprehension, identify difficulties, and implement corrective strategies. Conversely, the absence of metacognitive awareness often results in superficial reading and limited comprehension.

To address these challenges, the implementation of metacognitive strategies has been widely recognized as an effective pedagogical approach. Metacognitive strategies facilitate learners' ability to regulate their cognitive processes through systematic stages of planning, monitoring, and evaluating. Nunan (2003) emphasizes that these strategies empower learners to take control of their learning, thereby promoting autonomy and strategic thinking. During the planning stage, learners activate prior knowledge and set reading goals; during the monitoring stage, they assess their understanding in real time; and during the evaluating stage, they reflect on their comprehension and strategy use. Empirical studies, such as Rahimi and Katal (2018), demonstrate that the application of metacognitive strategies significantly enhances students' reading ability, particularly in identifying main ideas, interpreting vocabulary, and making inferences.

Compared to conventional teacher-centered approaches, metacognitive strategies offer a more learner-centered framework that fosters active engagement and critical thinking. By encouraging students to reflect on their own thinking processes, these strategies not only improve reading comprehension but also develop learners' independence and self-regulation. As a result, students become more strategic readers who are capable of addressing their own learning difficulties.

Given the theoretical and empirical support for metacognitive strategies, it is necessary to investigate their effectiveness in improving students' reading ability, particularly in the context of descriptive texts. Therefore, this study aims to examine whether the use of metacognitive strategies has a significant effect on students' reading ability at the eleventh grade of SMKN 1 Kelayang. The findings of this study are expected to contribute to both theoretical and practical perspectives in EFL pedagogy, particularly in enhancing students' reading ability through the implementation of effective and learner-centered instructional strategies.

LITERATURE REVIEW

Reading Ability

Reading ability is one of the important skills in learning English because it helps students obtain information and understand written texts. According to David Nunan (2018), reading is an active process in which readers combine information from the text with their background knowledge to construct meaning. This means that reading is not only recognizing words, but also understanding ideas and interpreting information. Similarly, Jeremy Harmer (2017) states that reading is an active skill because readers must interact with the text to gain comprehension. Students with good reading ability are able to identify main ideas, understand detailed information, interpret vocabulary, and make conclusions from the text.

In this research, the focus is on descriptive text. According to Ken Hyland (2019), descriptive text is a text that describes a person, place, animal, or object in detail so readers can imagine it clearly. In addition, Peter Knapp and Megan Watkins (2018) explain that descriptive text consists of two structures: identification and description. Furthermore, William Grabe and Fredricka L. Stoller

(2020) explain that reading comprehension includes identifying main ideas, finding detailed information, understanding vocabulary, identifying references, and making inferences. Therefore, reading ability is essential for students to understand descriptive texts effectively.

Metacognitive Strategy

Metacognitive strategy is a learning strategy that helps students control and evaluate their own thinking process during learning. According to Limei Zhang (2017), metacognition refers to learners' awareness and regulation of their cognitive processes while learning. This strategy helps students become more active and independent readers. According to David Nunan (2018), metacognitive strategies allow students to manage their own learning process through planning, monitoring, and evaluating. Planning means preparing before reading, monitoring means checking understanding during reading, and evaluating means assessing comprehension after reading.

Similarly, Anna Uhl Chamot (2019) explains that metacognitive strategy consists of planning, monitoring, problem solving, and evaluating. These stages help students understand texts more effectively. Research by Mohammad Rahimi and Mohammad Katal (2018) found that metacognitive strategies improve students' reading comprehension because students can identify difficulties, monitor understanding, and apply appropriate strategies while reading.

In addition, Feng Teng (2020) states that metacognitive strategies help students organize information and evaluate their comprehension during reading activities. Therefore, metacognitive strategy is considered effective in improving students' reading ability, especially in understanding descriptive texts.

RESEARCH METHOD

This study employed a quantitative method using a true experimental design with a pre-test and post-test control group structure to examine the effect of metacognitive strategies on students' reading ability. The participants were eleventh-grade students of SMKN 1 Kelayang in the academic year 2025/2026. A

cluster sampling technique was used to select two intact classes as the sample: one as the experimental group and the other as the control group.

The primary instrument was a reading test focusing on descriptive texts, constructed based on five indicators of reading ability: identifying the main idea, finding specific information, understanding vocabulary in context, identifying word references, and making inferences. The instrument was validated through expert judgment and tested for reliability using Cronbach's Alpha.

The data were analyzed using SPSS 26 through normality test, homogeneity test, and independent sample t-test. These tests were used to determine whether the metacognitive strategy had a significant effect on students' reading ability.

FINDINGS AND DISCUSSION

Descriptive Statistic Data

Based on the results of the research conducted at the eleventh grade of SMKN 1 Kelayang, it was found that the use of Metacognitive Strategy had a significant effect on students' reading ability of descriptive text. The students who were taught by using Metacognitive Strategy showed better improvement compared to the students who were taught by using conventional teaching methods.

The result of the post-test showed that the mean score of the experimental class was 84.53, while the mean score of the control class was 76.82. It indicates that students in the experimental class achieved higher reading ability after receiving treatment through Metacognitive Strategy. In addition, students became more active in planning, monitoring, and evaluating their understanding while reading descriptive texts.

Table 1. Descriptive Statistic Data

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PreTestExp	32	40	70	55,47	7,444
PostTestExp	32	70	100	84,53	6,520
PreTestCntrl	22	40	65	55,00	7,237

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PostTestCntrl	22	60	90	76,82	6,994
Valid N (listwise)	22				

Based on the table above, the descriptive statistics show the students' scores in both the experimental class and the control class before and after the treatment. In the experimental class, the pre-test scores ranged from 40 to 70 with a mean score of 55.47 and a standard deviation of 7.444. After receiving the treatment, the post-test scores increased significantly, ranging from 70 to 100 with a mean score of 84.53 and a standard deviation of 6.520. This indicates that the students' reading achievement improved after the implementation of the treatment.

Meanwhile, in the control class, the pre-test scores ranged from 40 to 65 with a mean score of 55.00 and a standard deviation of 7.237. The post-test scores ranged from 60 to 90 with a mean score of 76.82 and a standard deviation of 6.994. Although the control class also showed improvement, the increase in the experimental class was higher than in the control class.

Result of Reading Ability Pre Test and Post Test

This study investigated the effect of Metacognitive Strategy on students' reading ability of descriptive text at the eleventh grade of SMKN 1 Kelayang. The data from the control and experimental classes were analyzed using SPSS version 27. The results of the pre-test and post-test are presented in the following tables.

Table 2. The Frequency Distribution of Reading Ability Scores in Control and Experimental Classes

Score	Pre-Test Control	Post-Test Control	Pre-Test Experimental	Post-Test Experimental
40	1	0	1	0
45	2	0	4	0
50	6	0	6	0
55	4	0	8	0
60	5	1	8	0
65	4	1	3	0
70	0	2	2	1
75	0	9	0	3
80	0	4	0	8
85	0	4	0	10

Score	Pre-Test Control	Post-Test Control	Pre-Test Experimental	Post-Test Experimental
90	0	1	0	7
95	0	0	0	2
100	0	0	0	1

Based on Table 2, the pre-test results of the control class showed that the highest score was 65 and the lowest score was 40. Most students obtained a score of 50 with a frequency of 6 students. Meanwhile, in the post-test, the highest score increased to 90 and the lowest score became 60. The most frequent score in the post-test was 75, achieved by 9 students. This result indicates that the students in the control class experienced improvement after the learning process.

In the experimental class, the pre-test results showed that the highest score was 70 and the lowest score was 40. The most frequent scores were 55 and 60, each achieved by 8 students. After receiving treatment using Metacognitive Strategy, the post-test results showed significant improvement. The highest score increased to 100 and the lowest score became 70. The most frequent score was 85, achieved by 10 students. These findings indicate that Metacognitive Strategy improved students' reading ability effectively.

Table 3. Classification of Students' Reading Ability Scores in Control and Experimental Classes

Category	Score	Control Class	Percentage	Experimental Class	Percentage
Very Good	80–100	9	40.9%	28	87.5%
Good	60–79	13	59.1%	4	12.5%
Sufficient	40–59	0	0%	0	0%
Less	0–39	0	0%	0	0%
Total		22	100%	32	100%

Based on Table 3, the control class was mostly categorized as Good with 13 students (59.1%), while 9 students (40.9%) were categorized as Very Good. In contrast, the experimental class showed better achievement, where 28 students (87.5%) were categorized as Very Good and only 4 students (12.5%) were categorized as Good.

Table 4. The result of the Analysis of the sample class Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pretest Control	,164	22	,126	,929	22	,116
Posttest Control	,216	22	,009	,932	22	,138
Pretest Experiment	,136	22	,200*	,964	22	,585
Posttest Experiment	,196	22	,028	,932	22	,132

The table above presents the results of the normality test using the Kolmogorov–Smirnov and Shapiro–Wilk tests for the pre-test and post-test scores of both the control and experimental groups. Based on the Shapiro–Wilk test results, the significance value for PreTestCntrl was 0.116, PostTestCntrl was 0.138, PreTestExp was 0.585, and PostTestExp was 0.132. All significance values are higher than 0.05. Therefore, it can be concluded that the pre-test and post-test data in both the control and experimental groups are normally distributed.

Although the Kolmogorov–Smirnov test showed significance values below 0.05 for PostTestCntrl (0.009) and PostTestExp (0.028), the Shapiro–Wilk test is prioritized because it is more accurate and recommended for small sample sizes.

Table 5. Test of Homogeneity

Tests of Homogeneity of Variances					
			Levene Statistic	df1	df2
Result	Based on Mean	,070	1	30	,793
	Based on Median	,070	1	30	,793
	Based on Median and with adjusted df	,070	1	29,909	,793
	Based on trimmed mean	,089	1	30	,768

Based on the table, the significance value of Levene’s Test “Based on Mean” is 0.793. Since the significance value is greater than 0.05 ($0.793 > 0.05$), it can be concluded that the variances of the two groups are homogeneous. The other results, namely “Based on Median” (0.793), “Based on Median and with adjusted df” (0.793), and “Based on trimmed mean” (0.768), also show significance values

higher than 0.05, which further supports the conclusion that the data have equal variances.

Table 6. Independent Sample Test

Independent Samples Test										
		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
SCORE	Equal variances assumed	,099	,754	4,147	52	,000	7,713	1,860	3,981	11,445
	Equal variances not assumed			4,092	43,156	,000	7,713	1,885	3,913	11,514

From the table above, the output of the independent sample t-test shows that the t-test value is 4.147, the degree of freedom (df) is 52, the significance value is 0.000, the mean difference is 7.713, the lower interval of the difference is 3.981, and the upper interval of the difference is 11.445.

CONCLUSION

Based on the findings of the research, it can be concluded that the use of Metacognitive Strategy gave a significant effect on students' reading ability of descriptive text at the eleventh grade of SMKN 1 Kelayang. The students who were taught by using Metacognitive Strategy achieved better results than the students who were taught by using conventional methods. It was proven by the higher mean score of the experimental class in the post-test.

The implementation of Metacognitive Strategy helped students improve their understanding of descriptive texts through planning, monitoring, and evaluating

their reading process. This strategy also made students more active, independent, and critical during learning activities.

In addition, this research supports previous studies which stated that metacognitive strategies are effective in improving reading comprehension. Therefore, Metacognitive Strategy can be used as an effective teaching strategy in learning reading comprehension, especially descriptive text. Future researchers are suggested to conduct further studies with different materials or larger populations.

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