

THE IMPACT OF APPLYING MINDOMO APPLICATION TOWARD STUDENTS' WRITING SKILL ON DESCRIPTIVE TEXT AT TENTH GRADE

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Abstract

This research aims to assess whether the Mindomo application positively affects students' ability to write descriptive texts and to evaluate how it improves their writing skill. This research used a quantitative approach with a quasi-experimental design, incorporating pre-tests and post-tests. The sample consisted of 64 students from classes X3 and X4 at SMA Al-Irsyad Tegal for the academic year 2023/2024. The researcher employed pre-test, post test, and questionnaire to analyze the results. The pre-test scores were 47.19 for the experimental group and 48.66 for the control group, while the post-test scores were 80.31 for the experimental group and 71.41 for the control group. The researcher applied the T-test to examine differences and effects in the data. The paired sample T-test results showed a significance value of 0.000, which is less than 0.05. The results of the questionnaire showed that 73% students agree that using the Mindomo application can improve students' writing skills and the application has a positive effect. This indicates a significant effect and difference distinction the experimental and control groups regarding the impact of the Mindomo application on students' writing skills.

Keywords: *Mindomo Application, Writing Skill, Descriptive Text.*

INTRODUCTION

According to Riski Mayusandra (2023), writing is a skill that enables the indirect, productive, and expressive communication of ideas and thoughts. This means that writing can organize the writer's words and convey their intentions clearly. Writing can also be interpreted as an activity to express thoughts in written form. In writing, students are faced with various components such as grammar, vocabulary, and punctuation to create good writing (Aminatun, et al., 2019). Writing is a difficult skill in English. It requires attention to various components such as grammar and vocabulary.

Descriptive text is one of the various types of texts used in English language teaching. Descriptive text describes someone or something. According to Fitri Handayani (2020), descriptive text is a type of writing used to describe something, such as a particular place, person, or object based on its physical condition. Descriptive text aims to provide a detailed description to help readers understand the subject easily.

According to the observations of the researcher's in class X at SMA Al-Irsyad Tegal, students are less interested in writing during English lessons. They find writing difficult due to several reasons. Most students lack vocabulary and struggle with applying English grammar. When they start writing, they often get stuck expressing their ideas. Additionally, students have idea to writing but don't know how to start it. Therefore, the researcher needs to find a suitable method to help students overcome their disinterest in writing.

Mindomo application is an application with the concept of mind mapping. Mind mapping is a method that employed by writing the important points in it first, then elaborating it into broader points. With the advancement of technology, mind mapping techniques are no more used manually or using paper. The Mindomo application is a tool that uses the concept of mind mapping. According to Riski, et al (2023), Mindomo is an Android application that allows you to make mind mapping to visually express ideas.

The concept of the Mindomo application is very appropriate, as it helps students remember and organize text more easily when presented in an interesting way. According to Buzan (2010), the Mindomo app can help students by promoting creative thinking and bridging important ideas in a focused area. The advantage of this application is its ability to provide a large number of features that can be used for free by users to create mind maps. This makes it an attractive alternative option as it gives its users wide acces to developing mind mapping. This is considered more effective than mind mapping manually.

METHODOLOGY

Research Approach

The researcher used quantitative research methods in this study. Creswell (2014) states that quantitative research tests objective ideas by analyzing the relationships between variables. The researcher conducted the data collection process using research instruments and then proceeded with precise data analysis.

Type of Research

Experimental research methodologies fall into three main categories: pre-experimental, experimental, and quasi-experimental. Sugiyono (2022) explains that experimental research methods determine how specific treatments affect individuals in controlled settings. The authors of this study used a quasi-experimental design with a two-group. In a quasi-experiment, two groups participate: one class acts as the experimental group, and the other serves as the control group.

Population

According to Sugiyono (2022), the researcher determine a population of objects or subjects with certain numbers and characteristics to study and analyse in order to draw conclusion. This implies that the population includes all students in a school. The population in this study is four classes from the tenth grade students registered at Al-Irsyad Tegal High School during the 2023/2024 school year. There will be a total of 128 students.

Sample

Sampling is made from the population, meaning that everyone has the same opportunity in the population to become a sample in this study. According Sugiyono (2022), the sample represents a part of the number and characteristics of the population. In this research sample, the researcher using class X3 as the control class and X4 as the experimental.

Data Collecting Technique

The study uses tests and questionnaires as its instruments. Brown (2019) states that a test assesses a person's skills, understanding, or performance in a specific area. The researcher use two types of tests: pre-tests and post-tests. Before administering the post-test, the experimental group uses the Mindomo program during the learning process. After the post-test, the researcher gather students' feedback on the Mindomo program by distributing questionnaires. The researcher must collect data before they can test the hypothesis. The steps for gathering data are listed below:

Pre-test

Before starting the treatment in both of the classes, a pre-test needs to be conducted to assess the students' initial writing skills. The researcher used pre-test to assess the students' writing skills before the treatment, which allowed students to measure how much students had learned.

Treatment

Some treatment given to the experimental and control groups. The experimental group taught by using the Mindomo application in writing descriptive text, while the control group taught without the Mindomo application

Post-Test

The researcher implemented a post-test to evaluate students' learning outcomes after the treatment. The experimental class used the post-test to determine the effect of using the Mindomo application in improving students' writing skills. The experimental class created a text outline used Mindomo application first, while the control class created the text as usual.

Questionnaire

Sugiyono (2022) defines a questionnaire as a tool for data collection where participants respond to a series of written questions or statements. In this research, the researcher used a Likert scale. Sugiyono (2019) explains that the Likert scale measures an individual's attitudes, beliefs, and understanding of social issues. The questionnaire provided to respondents served as a research instrument to determine students' responses to the Mindomo application regarding their writing skills.

RESULT

Data results were the most important aspect of the study. The researcher presented the results from the experimental and control classes, specifically from classes X3 and X4 at SMA Al-Irsyad Tegal. To collect data, the researcher conducted a pre-test, applied the treatment, and then administered a post-test. Additionally, the researcher distributed questionnaires to assess students' responses to the Mindomo application. The post-test results revealed whether the treatment led to a significant difference in the students' scores.

Descriptive Statistics

Table 1. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
pre_experimental	32	17	40	57	47,19	3,955
post_experimental	32	24	69	93	80,31	5,146
pre_control	32	15	40	55	48,66	3,973
post_control	32	34	51	85	71,41	8,504
Valid N (listwise)	32					

The experimental group has 32 participants with the pre-test scores ranging from 40 to 57. After using the Mindomo application, the post-test scores ranged from 69 to 93. The control group, also with 32 participants, had the pre-test scores between 40 and 55, and the post-test scores from 51 to 85. The experimental group's mean pre-test scores was 47.19 increasing to 80.31 post-test. While the group's mean increased from 48.66 to 71.41. The experimental group attained a greater average post-test score than the control group.

Normality Test

If the Sig. value exceeded 0,05, the researcher considered the data normally distributed and proceeded with the paired T-test. Conversely, if the Sig. value was below 0,05, the researcher determined the data were not normally distributed and continued with the Wilcoxon test. The researcher chose the Kolmogorov Smirnov test for the normality test because number of sample above 50.

Table 2. Normality Test

	Kelas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Writing skill at tenth grade	Pre-Test Experimental Class	,145	32	,086	,936	32	,056
	Post-Test Experimental Class	,111	32	,200*	,973	32	,600
	Pre-Test Control Class	,097	32	,200*	,958	32	,242
	Post-Test Control Class	,137	32	,130	,922	32	,023

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Previous table presented that the Sig.value for the pre-test in experimental class was 0.086, whereas it was 0.200 for the control class. For the post-test, the Sig.value was 0.200 for the experimental class and 0.130 for the control class. Since the Sig.values for both data sets were above 0.05, we assumed that the data followed normally distributed.

Homogeneity Test

The researcher conducted this test before calculating the t-test and after performing the normality test. It aimed to find the data was homogeneously distributed, which was indicated by significance value.

Table 3. Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil	Based on Mean	1,548	3	123	,206
	Based on Median	1,534	3	123	,209
	Based on Median and with adjusted df	1,534	3	108,255	,210
	Based on trimmed mean	1,533	3	123	,209

The table above showed that the data was homogeneously distributed, as indicated by a significance value greater than 0,05. The researcher used Levene's statistical test with SPSS 26. The significant result based on the mean was 0.123, which is greater than 0.05.

Paired Sample Test

Table 4. Paired Samples Test

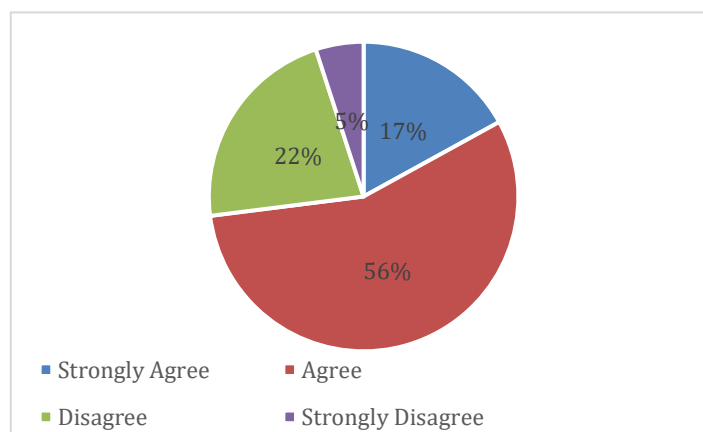
		Paired Differences							Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	
					Lower	Upper			
Pair 1	pre_eks - post_eks	-33,125	6,142	1,086	-35,339	-30,911	-30,508	31	,000
Pair 2	pre_control - post_control	-22,750	10,112	1,788	-26,396	-19,104	-12,726	31	,000

Table 4.2.2, "Test of Normality," shows that the Kolmogorov-Smirnov test revealed a Sig. value of 0.086 for the experimental class pre-test and 0.111 for the post-test. For the control class, the Sig. values were 0.200 for the pre-test and 0.130 for the post-test. Since all these values were above 0.05, the researcher concludes that the pre- and post-test data from both classes follows a normal distribution.

Following on the table above, the researcher observed that the Sig. (2-tailed) value was $0,000 < 0,005$. Based on the paired sample test, the result showed that the T-test for pair 1, which consisted of the pre-test and post-test of the experimental class, was 30,508. The T-test for pair 2, which consisted of the pre-test and post-test of the control class, was 12,726. Each T-test of the paired samples more greater than the T-table value at df, which was 2,4528. The T-test of paired 1 was higher than that of paired 2, $30,508 > 12,726$.

Questionnaire

In this study, the researcher distributed the questionnaire on a prepared paper sheet. The researcher used likert scale in this study. It included 9 questions, each offering four response options: Strongly Agree, Agree, Disagree, Strongly Disagree. According to the outcome of the test carried out, it is proven that the Mindomo application has a positive effect on students writing skill. The conclusion of the questionnaire can be showed in the preceding table and description.



Based on the pie chart above, from a total of 288 answer from students, 17% of students reacted "strongly agree", 56% reacted "agree", 22% reacted "disagree", and 5% reacted "strongly disagree." The results of the questionnaire indicated that most students agree that using the Mindomo application can improve students' writing skills and the application has a positive effect.

CONCLUSION

The study data revealed that class X students at SMA Al-Irsyad Tegal enhanced their descriptive writing skills with the Mindomo application. The results showed that the experimental group had a greater average post-test score examined to the control group, with scores of 80.31 and 71.41, respectively. This 8.906 point difference suggests that the Mindomo application has a positive effect on students' descriptive writing abilities. The T-test revealed a significance value of 0.000 between the post-test results of the experimental and control groups. Since this value is less than the 0.05 level set by the researcher, the study confirmed the alternative hypothesis (H_a).

In addition, a questionnaire collected from 32 students revealed that 73% of them believe that the Mindomo application is fun and has a positive effect on students' writing skills. The students responses

showed that using the Mindomo application can increase the students enthusiasm for creating descriptive text.

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