

THE EFFECT OF MIND MAPPING ON JAMBOARD IN TENTH-GRADE STUDENTS PAST TENSE MASTERY

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Abstract

The purpose of this study to investigate the impact of mind mapping in google Jamboard on students' Simple past tense mastery. The instrument used in this research is a multiple-choice test. Quasi-experimental design is a method in this research with a sample of 60 class X MA Darullughah Wal Karomah students who were divided into control and experimental groups. The experimental group received teaching using mind mapping on google Jamboard, while the control group followed traditional teaching methods. The data shows that the average value obtained in the experimental class was 73.07, while in the control class it was 64.69. The research results show that the use of mind mapping in google Jamboard can improve students' simple past tense mastery. Mind mapping is an effective way or method for teaching grammar. Additionally, combining mind mapping with a digital platform like google Jamboard can create a more interactive, fun, and engaging learning environment. research should explore the impact of mind mapping through jamboard on other areas or skills of language learning. This study did not have much time. If the time were longer enough, the finding would be more effective. So, in the future, researchers should have more time to do it and ensure the internet connection is good because if it is bad, it will also take a lot of time

Keywords: Simple past tense; Jamboard; Mind Mapping

INTRODUCTION

Language is a communication tool used by all humans. People use language to talk or provide information to other people. Without language, humans cannot communicate to provide information or convey their thoughts and feelings. English is a global language. Even today English is taught as an international language in all educational institutions throughout the world (Crystal, 2014). The public's need for English language skills is growing rapidly. Many countries use English as their second language.

In learning several class levels are adjusted to students' abilities, namely beginner classes to advanced classes. Each class will be taught about grammar according to each class. Mastering grammar is key in learning a foreign language, including learning English, because it supports the four language skills Listening, Reading, Writing, and Reading (Wibowo, 2020).

One of the challenges for students in learning English is mastering vocabulary, pronunciation, and tenses, especially the simple past tense (Sri Handayani & Salija, 2022). Many factors make students find it difficult to learn simple past tense because they don't understand English. Simple past tense is important in conveying information about events that have already happened in the past. Effective learning requires methods that enhance student understanding and facilitate the teaching and learning process. One method that can be used is mind mapping in digital platforms such as Jamboard (Mamiya Hernandez, 2023).

Google Jamboard is a digital smart board that can be accessed easily. Teachers and students can collaborate on this virtual whiteboard which allows them to develop their ideas or opinions, students can also sketch and draw (Virto & Lopez, 2020).

Mind mapping can help students better understand the relationship between tenses, verbs, and sentence context. (Normawati, 2020), mind mapping is one of the methods that is effective in teaching grammar. (Sweeney et al., 2021) Using Jamboard as a learning tool can create an interesting learning environment for students.

The use of mind mapping in teaching grammar has a positively significant effect on teaching grammar (Ngoc, 2023). In that study, the subject was 7th-grade students of junior high school. The study used the experimental method where there were control and treatment groups.

Using mind mapping in teaching grammar can help the students to memorize and understand the concept of grammar (Wibowo, 2020). The students also feel enthusiastic during the grammar teaching-learning process. The subject in this study was the students in 2nd semester of the Department of English Education at IAIN Surakarta.

There was also a study mentioned that mind mapping can enhance the student's knowledge of grammar (Yen, 2019). The students said that using mind mapping in teaching grammar can help them memorize the grammar easily. The subject of this study was 10th grade at Thai Nguyen High School.

Those previous study is focus of using mind mapping in learning grammar on 7th grade students, 2nd semester of English department, and 10th grade at Thai Nguyen. However, in this study uses jamboard as a medium to create mind mapping while the other studies and the other studies did not mention what tenses that being studied while this study uses the past tense.

By understanding the effectiveness of this teaching method, it is hoped that this research can make a positive contribution to the development of English language learning strategies at the high school level, and provide a more in-depth picture of the application of technology in grammar learning, especially simple past tense.

METHOD

The kind of this research is quantitative research through experimental classes. Experimental research is a method or way to find out the causal relation between two factors (Arikunto, 2006). This study tries to investigate the effect of Mind mapping in learning simple past tense through Jamboard on Senior High school tenth-grade students. Experimental research is defined as the most complete quantitative research approach, meaning that it meets all the requirements for testing cause-and-effect relationships (Sugiyono, 2010). This research used a quasi-experimental design. A quasi-experimental design is a non-randomized subject and has manipulation of the independent variable (Ary et al., 2014). There are two classes selected, then given a pretest to find out the score of the treatment and control class. After knowing the results of the pre-test for the two groups, the experimental class was given treatment, while the control class was not given treatment.

Respondents

The respondents for this research were 60 Tenth-grade students of MA Darullughah Wal Karomah in the academic year 2023/2024. There were two classes such as XI-C and XI-E as the subject of this research.

Instrument

A research instrument is a tool that is used to measure observed natural and social phenomena (Sugiyono, 2010). The instrument in this research is a test in the form of multiple-choice questions related to the research title "The Effect of Mind Mapping in Learning Past Tense Through Jamboard"

Procedures

The first step to do this research such as, first the researcher did a try-out. The try-out was being done because the researcher needed to know the reliability and validity of the instrument. After the instrument was valid and reliable, the researcher did a pre-test for both classes. This pre-test aimed to get to know the first skill of the students' speaking. Second, the researcher did the treatment which was mind mapping for the experimental group class and the traditional way for the control group class. Third, the post-test was done after the treatment. The post-test was used to get to know the students' knowledge about simple past tense after being given treatment. Last, the data was analyzed by using SPSS to get the significant difference.

Reliability and Validity

Reliability is the consistency of the instrument, which measures whatever can be measured (Ary et al., 2014). In a simple way, reliability is when the instrument for testing is consistent, stable, and dependable. This study will be used split-half reliability. Split-half reliability is where the test is divided into two halves and then calculates a coefficient correlation. (Ary et al., 2014) The researcher's reliability was 0,938. So, reliability is very high. The reliability criteria can be seen below.

Table 1 Reliability criteria

Cronbach's Alpha	Reliability Levels
$0,00 \leq r < 0,20$	Very Low
$0,20 \leq r < 0,40$	Low
$0,40 \leq r < 0,60$	Fair
$0,60 \leq r < 0,80$	High
$0,80 \leq r < 1,00$	Very High

Validity can be defined as extent to which the instrument measures what is to be measured (Sugiyono, 2010). The valid instrument means that the measuring instrument that used can be collecting the valid data. This study will be using content validity. Content validity is a test where the reference of the test is based on the curriculum, syllabus, or content from a book (Ary et al., 2014).

Data Analysis

This data was analyzed using statistical analysis to calculate test results using the independent t-test formula. This formula allows researchers to compare the pre-test and post-test to

determine the differences between the experimental and control classes. Data processing uses IBM SPSS Statistics 25 software.

FINDINGS AND DISCUSSION

Findings

This research was conducted from May 05th, 2024 until May 20th, 2024 at the tenth-grade student of MA Darullughah Wal Karomah Kraksaan Probolinggo. The data was collected from the experimental and control groups' pretest and post-test scores. The result of the implementation can be seen below.

From the data analyzed, it was found that there was a difference between pre-test and post-test scores in the experimental class. The lowest and highest score from pre-test is 52 and 72 the total of pre-test score is 1872 and the mean of the score is 62.40. The lowest and highest score from post-test is 60 and 86, the total of the post-test score is 2192 and the mean of score is 73.07. the conclusion of the table is the mean of pre-test is lower than the mean of post-test score, and the data of descriptive statistics in the experimental class can be seen below.

TABLE 2 Table of Descriptive Statistic of Experimental Class

Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Pretest	30	20	52	72	1872	62.40	5.858	34.317
Post-test	30	26	60	86	2192	73.07	5.527	30.547
Valid N (listwise)	30							

The control class for this research was X-C, so the table below are the results of descriptive statistics tests on control class data

TABLE 3 Table of Descriptive Statistics of Control Class

Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Pretest	29	22	50	72	1764	60.83	6.623	43.862
Posttest	29	20	54	74	1876	64.69	5.911	34.936
Valid N (listwise)	29							

Based on the table presented above, the difference between pre-test and post-test scores was found. The lowest and highest scores from the pre-test are 50 and 72. the total pre-test score is 1764 and the mean score is 60.83. The lowest and highest scores from the post-test are 54 and 74, the total of post-test scores is 1876 and the mean score is 64.69. the conclusion of the table is the mean of the pre-test is lower than the mean of the post-test score.

Statistical Analysis

n this research, the researcher uses a T-test to test the hypothesis. If the significant is higher than (0,05), it means that the null hypothesis (H_0) is accepted. If the significant is lower than (0,05), it means that the null hypothesis (H_0) is rejected. The result of the hypothesis testing can be seen below.

TABLE 4 Table of the Result

Independent Samples Test										
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
VAR00001	Equal variances assumed	.518	.475	-5.625	57	.000	-8.37701	1.48923	-11.35913	-5.39489
	Equal variances not assumed			-56.419		.000	-8.37701	1.49095	-11.36325	-5.39077

Discussion

From the table above it can be concluded that the significance is 0,000 which is lower than 0,005, these are the data that have been collected by using T-test on SPSS. Because the significance is lower than 0,005 then the null hypothesis is rejected. It means that there is a significant difference between the students who are learning grammar, especially in the past tense using mind mapping through jamboard, and the students who are not learning using mind mapping through jamboard.

The research findings prove that the students' grammar especially in past-test was improved significantly because of mind mapping on the google jamboard. This statement is the same as (Normawati, 2020), mind mapping is one of the methods that is effective in teaching grammar. This also aligns with other researchers' statements such as: (Suseno & Setyawan, 2014) stated that mind mapping in teaching grammar has a positively significant effect on teaching grammar, and also it helps students easier to relearn the lesson. Using mind mapping in teaching grammar can help the students to memorize and understand the concept of grammar. Wibowo, (2020). There was also a study mentioned that mind mapping can enhance the student's knowledge of grammar. They also mentioned how mind mapping helped students become more motivated to study grammar principles, especially in learning tenses. (Yen, 2019). Jamboard is one of the media that is easy to use and access because it is free. Jamboard can help students deliver their ideas by uploading images. Also, they can draw or take notes on the whiteboard. Based on the definition, it can be concluded that Jamboard is a Google whiteboard that can help students deliver ideas by drawing or writing. Also, it can be used to encourage visual collaboration between students and teachers because it is easy to access.

CONCLUSION AND SUGGESTION

Conclusion

Based on the findings of this research, it is proven that the use of mind mapping through Jamboard significantly improves students' grammar mastery, particularly in the past tense. The research data mentioned that there was an improvement in the scores that the students got while doing the research. The experimental group which used mind mapping through Jamboard, showed a higher mean score in the post-test than the control group which did not use this method.

The result of the statistical analysis especially the T-test, confirmed that the improvement in the experimental group was statistically significant. In other words, the student's knowledge about grammar (past tense) was improved because of mind mapping through jamboard. This aligns with previous research which also stated that mind mapping is an effective way or method for teaching grammar.(Mamiya Hernandez, 2023).

Suggestion

In addition, combining mind mapping with digital platforms like Jamboard can create a more interactive, fun, and engaging learning environment. Future research should explore the impact of mind mapping through jamboard on other areas or skills of language learning. This study did not have much time. If the time were longer enough, the finding would be more effective. So, in the future, researchers should have more time to do it and ensure the internet connection is good because if it is bad, it will also take a lot of time.

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