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The Effectiveness Of Using Mind Mapping Technique To Teach Reading Comprehension
(A Pre-Experimental Study at Class VIII-C SMPN 1 Jombang in the Academic Year 2021/2022)

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	Abstract
Received: 22 Desember 2022 Revised: 24 Desember 2022 Accepted: 28 Desember 2022	*This research showed at finding out that the use of mind mapping technique reading comprehension. The research applied pre-experiment research design to the second year students of SMPN 1 Jombang. The sample was the VIII-C chosen by cluster sumpling technique. The data were collected through observation, and test. The data from observation were analyzed descriptively, whereas the data of the test were analyed stastistically. Based on the results of statistical calculations, the results show that there is a significant increase between pretest and posttest scores, the researcher knows that t count is greater than t table (13.140>2,060). By applying 0,05 level of significance with 32 samples. This means that the alternative hypothesis (Ha) i accepted and the hypothesis (Ho) is rejected. So there is a defference in grades VIII-C of SMPN 1 Jombang. It means mind mapping technique was effective.*
Keywords:	*Pre-experiment Reading Comprehension, Mind Mapping, and Descriptive text.*

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INTRODUCTION

According to bin Noordan & MD. Yunus (2022) reading is a thinking process because it involves thinking most of the time. It is also a complex cognitive process of decoding symbols in order to construct or derive meaning. Reading as one of the four language skills must be taught to the students in the classroom especially for junior high school students. "Reading is one of the essential skills for learning language'' (Nudiya & Rohani, 2019). The reading text also are shaped by the speakers of the language culturally and socially situated Haerazi and Irawan (as cited in Saori, 2020). Therefore, the reading process requires continuous practice, development, and refinement.

Reading as one of the four language abilities should be trained to students in class, especialy junior high school students. "Reading is studying technique, thought interpretation, folks canister benefit report, thoughts knowladge " Mogea (as sited in Mamaghe et al., 2020). Thru appraisal pupils canister gain new-fangled knowledge besaides appraisal remains lone the inportant sources that canister resolve the triumph or else botch education English At Conservatory pupils frequently perceive interpretation such as a tough expertise. Pupils can't

acquire interpretation   achievment the most essential aspect in interpretation grasp.

Reading comprehension is taken into consideration as one of the tremendous English competencies for rookies'' (Nurjanah, 2018). Studying comprehension can open new information for college students with correct know-how students gets statistis from what the writer conveys via the texts that scholars study, and students get records to enchance highbrow abilities specifically in English. Although studying comprehenion could be very critical for college students, there are nevertheless many differnt college students who're capable of studying a few texts in step with their pronunciation however they do now no longer recognize what they've studying.

It can be very important for the coach to identify strategies or techniques to solve problems. Accroding to preliminary study conducted at SMPN 1 Jombang in 08 Augst 2022. It is known that most students in the school still struggle to learn English in detail, especially when studying descriptive text learning in VIII class SMPN 1 Jombang for the still low matriculation.

METHOD

In conducting this study, the reseacher was apply a quantitative method in order to know The Effectiveness Of Using Mind Mapping Technique To Teach Reading Comprehension. The research design be used by the researcher in this study is a pre-experimental design. According to aksan (as cited in S. A. Indriyani, 2014), he stated that pre-experimental design is an experimental research in which there are external variables that affect the related variables, because the experiments carried out only involved one group without a comparison or control group and the time needed by researchers in the study was not too long. The researcher chooses one group pretest - posttest because the magnitude of the effect of the treatment could be known more accurately by comparing the results of the pre-test with the post-test.

In this population that used is from all students at VIII class of SMPN 1 Jombang that consist of eight classes.The sample is part of the group in the population. This means that if the population is very large, it be difficult for researchers to study groups of that population. Therefore, the researchers used samples taken from part of the population. The sample of this research is the students of class VIII of the SMPN 1 Jombang in the academic year 2021/2022 composed of 32 students, 16 boys and 16 girls. The researcher decides to select VIII-C because he thinks that VIIIC has subjects with average English proficiency. Based on the consideration of the English teacher and principal, this class is the appropriate class to be investigated.

The procedure of this research According to Hayati (2021), she explain that the design of the preliminary study must really include research whose contents explain what will be found in the form of research hypotheses and the importance of the research subject. Preliminary study is a study conducted to sharpen the direction of the main study because the reason for making it cannot be separated from the feasibility of the meaning of research related to research procedures and other things that are still unclear.

The research problem identification refers to a sense of awareness of a common social problem, social phenomenon or concept that is worth studying - because it needs to be investigated in order to understand it. Researcher identify the research problem through their observations, knowledge, wisdom, and skills. Research instrument is a tool used by researchers in collecting data. The instrument used by the researcher was a test. In this study, a vocabulary test was used to measure how much vocabulary mastery the students had. Researchers should use instruments to make it better data.

Validation involves the collection and analysis of data to assess the accuracy of the instrument. There are many tests and statistical measures to assess the validity of quantitative instruments, which generally involve trial and error. Data collection can be interpreted as an activity carried out by researchers to collect information or field data needed by researchers as the purpose of doing research. The results of the data acquisition will be used by researchers as a hypothesis test. Data analysis is the process of collecting, modeling, and analyzing data to extract insights that support decision making. After the researcher finds the results of the research that has been done, the next step is to test the hypothesis. A research report is a written research result document that is made systematically. The purpose of making a research report is to solve the problem of the hypothesis made by the researcher.

In an educational research, the data collection process is very important. The data collected is closely related to the phenomenon that is the focus study. This data is used to make conclusions, according to the research objectives determined by the researcher. Data collection is closely related to measurement activities. Measurement is carried out to determine the ability or performance of something or something someone, either in the form of abilities, attitudes, skills, perceptions, and others. The data are basically classified into 2 techniques, namely test and non-test techniques. Data collection method is a technique used by researchers to obtain data in research.

The data collection method used by researchers in this study is to give a test. The researcher gave two tests to the students. The first test is pre-test and the second is post-test. Reliability is an important characteristic of any good test to be valid at all and the test must be reliable as a measuring tool. In the sense of the word, reliability means consistency, stability or trust. Overall, reliability can be understood as a test conducted to determine the reliability of a measuring instrument in producing consistent results. This test is an approach used to measure the internal consistency of a group of items. Where several items from the group are summed to form a total score on the scale. After testing the valid pre-test questions, the next step is to reliably validate the validation number. After the pretest and posttest data have been collected, they are then calculated using descriptive statistics which include the mean, median, mode, and others. then calculated the normality of the data from the pretest and posttest. after normal data, then analyzed by paired sample test. The data wil then analyzed using t-test. From the results of the hypothesis will be seen whether it is significant or not. The data analyzed using t-test using SPSS 25.

RESULTS & DISCUSSION
Results
The students' reading skill before being taught by using mind mapping.

Based on data analysis, the objective of this study was to determine the effectiveness of using mind mapping techniques in learning reading comprehension in SMPN 1 class VIII-C Jombang during the 2021-2022 school year. To achieve the research objectives, the researchers conducted a pre-experimental survey using pre-post testing tools. The research procedure that takes place in the teaching and learning process is divided into three phases. The first stage is a pre-study in which the researcher conducts a pre-study to determine the performance of the student by means of a pre-test. The second step is to give the students the same treatment. The treatment here involves learning to read using mind maps as a technical tool. The last step is a post-test. In the post-test, after processing the mind map, students assess their reading ability on a test.

To develop high-quality questions and tests, test items must first be validated. The person taking the validation test should also know about question validation and have more experience. Therefore, the candidate validation test subject used by the researcher in this study was an English teacher at SMPN 1 Jombang. The reason for choosing the English teacher was that the researcher felt that the English teacher was more experienced and had a better understanding of the students' abilities.

After the researcher received the validation results from the SMPN 1 Jombang English teacher, the test questions were tested on the class that was not used as the researcher's sample. The sample taken by the researcher was class VIIIC as a valid attempt because the English teacher suggested that class VIII-C was sufficient. Knowledge of English After testing the test questions, the researchers tested their validity using SPSS 25 software. The aim was to see the ability of students in classes VIII-C to accept the reading comprehension questions posed. by the researcher.

The significant difference between the students' reading mastery before and after being taught by using mind mapping.

After the statistical description of the pretest and protest was obtained, the researcher then compared the results. To know if there a significant difference between the results of the pretest and posttest in class VIII-C students?

There is a differce in the presentation of data befor and after being taught by using mind mapping. The data obtained showed that the score after being taught by using mind mapping as atechnique was higher than before being taught using mind mapping.

The researcher used a statistical test using a paired sample t-test stated by SPSS 25 to ensure the effectiveness of using mind mapping. Before the researcher tested the effectiveness of the pretest and posttest results, the data to be tested had to have normal results first. Therefore, the researcher tested the results of the pretest and posttest with a normality test. The goal is to see whether the resulting data is normal or not.

Table 1.1. Paired Sample Test

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	pretest – posttest	-9.063	3.902	.690	-10.469	-7.656	-13.140	31	.000

The results of the paired sample test showed. The output shows the avarge pre-test and post-test were (-9.063), standard deviation (3.902), mean standard error (0.690). the bottom differnce (10.469), while the top difference (-7.656), the results of the t-test= (-13.140) with df of 31 and significance of 0.000.

With a significant number of 0.000, it means that it is getting smaller of 0.05, then 0.05, then it can be stated that Ha: accepted and H0: rejected. It means, there is a significant average difference between the results of the pre-test and post-test using mind mapping. Thus, it can be conduded thar using mind mapping is effective to teach mind mapping reading comprehension of class VIII-C students of SMPN 1 Jombang.

Discussion

The students reading skill before taught using mind mapping

First, the author explains each meeting about the teaching and learning process. The first meeting of the researchers asked some of the knowledge they know and what are the obstacles in learning English, especially in the reading section. They mentioned some difficulties in reading English. After that, the researcher explained about the descriptive text and continued with giving a test (Pre-test) with multiple choice test questions. In the pre-test, class VIII students gave less response, they were less enthusiastic in participating in learning and doing tests, because many of them were still confused in reading. According to Astuti (2018), reading comprehension skills are very weak. There is no visible motivation from students to practice their reading skills, especially reading English texts. Their motivation in learning is very low, namely students only receive explanations from the teacher and do not actively ask questions when they have difficulty in writing. Therefore, teachers must be able to present a classroom atmosphere that can build students' enthusiasm and interest in writing English.

Then, after the pre-test, class VIII students did the treatment. The treatment was given twice, students were taught descriptive text by applying mind

mapping techniques. In the first treatment, students explained again about descriptive text and they made examples of descriptive text with a free theme and the second treatment, students discussed descriptive text and they made descriptive text from the descriptive they had prepared.

Furthermore, grade VIII students were given a post-test by applying the same test as the pre-test. In the post-test, they were more enthusiastic in doing the test. They can understand and make descriptive text better than before. This is because students often read and write stories in English.

Therefore, based on the results of the students' pre-test and post-test, there is an effect of using mind mapping techniques in teaching reading comprehension, especially in writing descriptive texts. It is concluded that the use of mind mapping technique is an effective method to help students' understanding in the teaching and learning process.

The students reading skill after being taught using mind mapping

The first meeting, the researcher asked some of the knowledge that the students knew and what were their obstacles in learning English, especially in the reading process. They mentioned some difficulties in learning English. After that, the researcher explained about descriptive text and continued with giving a test (Pre-test) with test questions that made descriptive text with a free theme. In the pre-test, the class VIII students were less enthusiastic, but they still found it difficult to write descriptive text because they still lacked vocabulary. According to Suparmin (2017), vocabulary has an important role in the English language teaching program. It displayed in every language skill teaching. It means that vocabulary mastery is an important part of learning foreign language.

Then they did the treatment after doing the pre-test. The treatment was given twice, students were taught descriptive text by applying mind mapping techniques. In the first treatment, students re-explained descriptive text and they made examples of descriptive texts with free themes and the second treatment, students discussed descriptive texts and they made descriptive texts and mind mapping from their descriptive that they had prepared

Is there a significant effectiveness of the students reading skill before and after being taught using mind mapping

The following is an explanation of the pre-test and post-test scores: The results of the pre-test scores were obtained from the experimental class before receiving treatment. Based on table 2.8 shows the results of the paired sample test. The output shows the mean of pre-test and post-test are (-9.063), standard deviation (3.902), mean standard error (0.690). lower difference (10.469), while the upper difference (-7.656), the results of t = (-13.140) test with df 31 and a significance of 0.000.

Based on the results of statistical calculations, the results show that there is a significant increase between pretest and posttest scores, the researcher knows that t count is greater than t table (13.140> 2,060). This means that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. So there is a difference in grades VIII-C of SMPN 1 Jombang.

The results of this study are reinforced by the opinion of Indriyani (2014), who says that larning using technique mind mapping will help them understand the lesson well, and then they can learn English in a more effective and interesting

way. As a way to help the students easier in reading comprehension, using mind mapping also has a purpose. Generally, the pupose of mind mapping is to associate ideas, topics, or thing. This research also selected that mind mapping is effective to be taught in learning English.

Being active in learning is important, there will be speaking and listening, writing, reading, and reflection activities that lead students to meaning. Students will try to identify lessons, ideas, and various things related to the topic being studied. In active learning, the teacher acts more as a facilitator than a knowledge provider by Muchlisin (2021). In my finding, the students are also active in doing teach learning process.

From the explanations of several experts above and from the results of data analysis, it can be conculed that using mind mapping can help students understand new and frequently used reading comprehension in everyday life. Using mind mapping in reading learning is more interesting for students. So that students will not be bored with the monotonous learning process. That way the learning process can run effectively.

CONCLUSION

Based on the results of statistical calculation obtained the results that there is a significant difference between the pre-test and post-test. The output shows the mean of pre-test and post-test are (-9.063), standard deviation (3.902), mean standard error (0.690). lower difference (10.469), while the upper difference (-7.656), the results of t=(-13.140) test with df 31 and a significant number of 0.000. with a significant number 0.000, it means that the smaller 0.05 then 0.05 then it can be stated Ha: accepted and H0: rejected. Therefore, there is a significant difference between the results of the pre-test and post-test using mind mapping. Thus it can be concluded that the use of mind mapping for mind mapping is effective for teaching reading comprehension of mind mapping for class VIII-C students of SMPN 1 Jombang.

REFERENCES

Astuti, P. (2018). *Peningkatan Kemampuan Membaca Pemahaman Bahasa Inggris Melalui Media Komik Berbahasa Inggris Pada Siswa Kelas VIII MTS*. *32*.

bin Noordan, M. N. H., & Md. Yunus, M. (2022). The Integration of ICT in Improving Reading Comprehension Skills: A Systematic Literature Review. *Creative Education*, *13*(06), 2051–2069. https://doi.org/10.4236/ce.2022.136127

Hayati. (2021). *Pengertian Studi Pendahuluan, Tujuan, Manfaat, Cara Membuat, dan Contohnya*.

Indriyani, S. A. (2014). *The Effectiveness of Using Mind Mapping in Improving Students' Reading Comprehension of Narative Text*.

Indriyani, S. A. 2014. (2014). *The effectiveness Of Using Mind Mapping in Improving Students' Reading Comprehension of Narrative Text*.

Mamaghe, N., Rombepajung, P., & Hampp, P. (2020). *Improving Students' Mastery of Vocabulary Through The Use of Glossing Technique*. *8*.

Muchlisin, R. (2021). *Pembelajaran Aktif (Active Learning) - Pengertian,*

Karakteristik, Prinsip dan Jenis-jenis.

Nudiya, & Rohani. (2019). *Improving Students' Reading Comprehension of Report Text Using KWL Strategy. In journal of English language teaching, 29 July 2019.*

Nurjanah. (2018). *The Analysis on Students' Difficulties in Doing Reading Comprehension Final Test. Journal of English language literature and teaching, 2018.*

Saori, S. (2020). *the use of midmapping to teach reading comprehension*. 8, 169.

Suparmin. (2017). *Pentingnya Kosakata Pada Keterampilan Bahasa Inggris*.