IMPROVING STUDENTS' READING COMPREHENSION THROUGH MIND MAPPING TECHNIQUE

[1]Addini Fadhilah, [2]Indra Jayanti Damanik, [3]Bismar Sibuea, [4]Marhaeni K.D Matondang
Fakultas Keguruan Dan Ilmu Pendidikan Universitas Simalungun
[1]Fadhilahaddini9@gmail.com, [2]Jayantidamanikiin@gmail.com

ABSTRACT

The purpose of this research was to improve students' reading comprehension through the implementation of Mind Mapping Technique at the eighth grade of MTs Mesra Pematangsiantar. This research used a quantitative approach with a pre-experimental design, specifically a one-group pre-test and post-test design. The population of this research was all the eighth grade students consisting of 307 students, and the sample was class VIII-2 with a total of 32 students selected through purposive sampling. The data collection was conducted by administering pre-test and post-test in the form of multiple-choice questions. The data were analyzed by using SPSS version 26.0, including frequency distribution, statistical analysis, normality test, homogeneity test, and hypothesis test. The result showed that there was a significant difference between the students' pre-test and post-test scores after applying the Mind Mapping Technique. The result of research was Ttest (10,486) > Ttable (1,668) at the significance level α = 0.05 with the degrees of freedom (df) = (32-1=31) for one class so the degrees of freedom within groups is 62. The students' mean score increased from 51.56 in the pre-test to 70.31 in the post-test. In the pre-test, only 4 students passed the minimum mastery criteria, while after the treatment, 15 students achieved scores above the minimum criteria. It means that H0 is rejected and Ha is accepted. Based on the evidence from the research results, the post-test has a higher score than the pre-test. From these results it was concluded that there was a significant difference in improving students' reading comprehension before and after being given treatment using Mind Mapping Technique as a learning technique. Therefore, it can be concluded that the use of Mind Mapping Technique significantly improved the students' reading comprehension at the eighth grade of MTs Mesra Pematangsiantar.
Keywords: Mind Mapping Technique, Reading Comprehension, Learning Technique, English
Language Teaching, Pre-Experimental Design

I. INTRODUCTION
The Background of Research

Reading comprehension is a fundamental skill in English language acquisition. Despite its importance, many students still struggle to grasp the main ideas, supporting details, and vocabulary in texts. According to Asyah et al. (2024) stated that the results of the research show that mind mapping helps students organize information visually, which makes it easier for them to see relationships between concepts more clearly and holistically. The use of mind mapping has also been proven to stimulate students' creativity by encouraging them to think divergently and produce various new ideas. Mind mapping technique refers to a technique developed by Tony Buzan. According to Buzan in (Anon, 2021) explained that Mind Mapping is a powerful tool for brainstorming, creative thinking, problem-solving, organizing of ideas and of course, note-taking. Hence, mind mapping can be considered an important technique that helps to improve students' concentration on the topic, which leads to students' better performance in retelling stories.

Researchers are interested in using the mind mapping technique to significantly improving students' reading comprehension at MTs Mesra Pematangsiantar school. Based on the researcher's previous experience, the majority of students still lack understanding of the main idea, grammatical features, supporting ideas and vocabulary content. The researcher wanted to conduct a research using the mind mapping technique because it aimed to find out whether this learning technique could improve students' reading comprehension. In addition, the researcher also wanted to explore the potential implementation of mind mapping techniques in learning at MTs Mesra school. The focus of this research is to assess the success of the mind mapping technique in improving students' reading

comprehension in English language learning in accordance with the Merdeka curriculum. By using this technique, the researcher expects the students should increase about their ability in English in terms of the achievement in reading comprehension.

The Problem of Research

Related to the background above, the researcher formulates the problem of research as "Does Mind Mapping (MM) Technique can improve the students' reading comprehension at eighth grade of MTs Mesra Pematangsiantar?"

The Objective of Research

Based on the problem of research above, the objective of research is to improve the students' reading comprehension through Mind Mapping (MM) Technique at eighth grade of MTs Mesra Pematangsiantar.

II. THE REVIEW OF LITERATURE

Definition of Reading Comprehension

Reading is always closely related to comprehension. To understand the content of reading well, reading comprehension is very important. This aspect is one of the keys in reading activities because by understanding the material read, one can improve their reading ability as well as achieve certain goals. According to Erya et al. (2021) stated that the reader must understand the meaning of the written language after he reads it. Reading comprehension is a procedure where the reader needs to select an etymological picture and reproduce it to the point where the whole is planned by the writer. Reading comprehension is just a term that refers to reading, the ability through which is important is not on articulation or reading load, however it is the comprehension that is considered.

Definition of Mind Mapping Technique

Mind mapping is a powerful visual tool that helps organize information and ideas in a structured way. It enables individuals to brainstorm, connect concepts and enhance understanding, making it particularly useful for learning and problem-solving. By using a mind map, one can visually represent thoughts and relationships, facilitating clearer thinking and better retention of information. Mind mapping technique is one of the techniques that can be applied in the learning process to improve students' reading comprehension. By using mind mapping, all learning materials can be broken down into simple parts or ideas so that the learning process or the process of transferring knowledge can occur or be carried out more effectively (Tatipang et al., 2022).

The mind mapping technique is a valuable tool for enhancing students' reading comprehension. By breaking down learning materials into simpler parts, it facilitates a more effective knowledge transfer process. This technique not only helps improve students' English language skills but also allows for better exploration of ideas and concepts. It aligns with the natural way our brains function, optimizing cognitive potential and making learning more efficient. Overall, mind mapping is an effective strategy for improving understanding and retention of information.

III. THE METHOD OF RESEARCH

The Research Design

The researcher employed a quantitative approach in this research, especially pre-experimental design. A design used by the researcher was one-group pre-test and post-test. Sugiono (2014) said that a pre-experimental design is one in which one group or class is received pre-test and post-test. This one group pretest and posttest strategy is conducted on a single group without the use of a control or comparison group. Sukardi (2007) stated that pre-experimental research as the simple research that uses singular variable is the research that used individual or group as the subject of study. Then this research is used to know whether using MM (Mind Mapping) Technique is effective or not.

The Location of Research

The location of the will conducted at MTs Mesra Pematangsiantar.

Source of the Data

The source of data in this research is the subject or location from which the data can be collected for the purpose of the research. Source of data of this research are the students participations in the eighth grade MTs Mesra Pematangsiantar. In this research, the researcher chose a quantitative approach consisting of pretest and posttest.

The Technique of Collecting Data

Data was collected through a reading comprehension test consisting of 10 multiple-choice questions. The tests were administered as a pre-test before treatment and a post-test afterward. Each question assessed indicators such as identifying main ideas, vocabulary, inferences, and supporting details.

The Technique of Analyzing Data

The data of students' score for pre test and post test was analyzed by using SPSS version 26.00. The researcher will show and explain about data frequency, statistical table, test normality, test of homogeneity and test of hypothesis. From the result of the data processing, to prove whether there was any significance different between students' ability on reading or not by using Mind Mapping Technique at the eighth grade in MTs Mesra Pematangsiantar.

Before starting the treatment, the researcher administered a pre-test to adequately assess the students' reading comprehension. This pre-test was developed to assess many facets of their reading compreehnsion, such as grammar, coherence, and vocabulary. After the treatment, the researcher conducted a post-test to test the improvement of students' reading comprehension using mind mapping in learning technique.

IV. ANALYSIS OF DATA

Data Analysis

Based on the table of Anova, the researcher found that the total of sum of squares between groups and within the groups is 28943,750. The df (degree of freedom) in between groups is 1 and the df (degree of freedom) within groups is 62. In addition, the mean square between groups is 5625,000and the mean square within groups is 376,109. Then between groups have sum of squares is 5625,000 and within groups have sum of squares is 23318,750. Based on the table, fcount 14,956> ftable 2,78 = at significance level α = 0,05 with degrees of freedom (df) = 62. Based on the table, it means that Ha is accepted, there is significant influence of using Mind Mapping Technique towards students' reading comprehension at eighth grade of MTs Mesra Pematangsiantar.

V. CONCLUSION AND SUGGESTION

Conclusion

In conclusion, the results of this research underscore the critical implications of the research findings, they are, the research proves that Mind Mapping Technique significantly improves students' reading comprehension, as students were better able to organize, understand, and recall text material. This is proven based on the results of the analysis data. The pre-test average score was 51.56, and the post-test average score increased to 70.31, indicating a significant improvement in students' reading comprehension. The homogeneity test showed that the data was homogeneous (Fcount = 14.958 > Ftable = 2.78), validating the use of parametric statistical tests. The t-test result (Tcount = 10.486 > Ttable = 1.668, with p = 0.000 < 0.05) confirms that the difference between pre-test and post-test is statistically significant. Therefore, H_0 is rejected and H_a is accepted. The research proves that Mind Mapping Technique significantly improves students' reading comprehension. Students also reported positive experiences using Mind Mapping, stating that the technique helped them understand what they previously found difficult, collaborate more effectively, fun, creative and remember information more easily.

Suggestion

After being involved in the teaching and learning process to conduct classroom action research, the researcher took some notes as suggestions that might be helpful and useful for further learning.

1) Suggestion for Teacher

Teachers should include mind mapping in their lessons to make learning more fun and effective. This visual tool can help students understand and remember complex topics better. Mind Mapping Technique can be used to develop and motivate the students' reading comprehension. Due the finding, English teacher can help students increase their reading comprehension by using Mind Mapping Technique. Mind Mapping Technique as one of the ways in teaching reading comprehension of narrative text because it can help the students in comprehending the text easier by work together in groups and individually. Mind Mapping Technique can provide learners with an opportunity to improve brainstorming and learn from each other in an active process.

2) Suggestion for Students

Students are encouraged to create mind maps when studying. This technique helps them organize their thoughts and makes it easier to grasp and recall information. In this research, the researcher found out that Mind Mapping Technique was influence the students. This strategy was effective to increase the students' reading comprehension because they working cooperatively in small group consist of 3-4 students each group and then indvidually. Mind Mapping is a powerful tool for brainstorming, creative thinking, problem-solving, organizing of ideas and of course, note-taking.

3) Suggestion for Readers

Readers can use mind maps to visualize important ideas and see how they connect. This can make reading more enjoyable and help them understand the material better. In this research, the researcher used Mind Mapping Technique to help students in Junior High School. The readers may conduct this strategy on different level of students, for example Senior High School. They can apply other kinds of texts, for examples, recount, descriptive, spoof, report, etc.

4) Suggestion for Next Researcher

Future researchers should look into how mind mapping works in different subjects and for various types of learners. This can help find the best ways to use mind mapping in education. When applying Mind Mapping Technique, the researcher hopes the next researcher can improve brainstorming, creative thinking, problem-solving, organizing of ideas and of course, note-taking because the students like to learn creatively and talk each other.

REFERENCES

Anon. (2021). Mind Mapping: A Powerful Tool for Brainstorming and Note-Taking.

Asyah, R., Maulida, R. D., & Hartati, S. (2024). The Effectiveness of Mind Mapping Strategy   in Teaching Reading Comprehension. Journal of English Language Teaching, 12(1), 45–   53.

Damanik, I. J., & Handayani, M. (2023). The Implementation Of Student Teams Achievvement Division (STAD) Technique To Improve Student's Reading Comprehension. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(1), 1-9

Damanik, I. J., & Harianja, G. S. (2022). The Effect Of Comic Books To Improve Reading Comprehension Ability At Grade VIII At SMP N 12 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 4(1), 49-53

Damanik, I. J., & Saragih, N. (2020). Bilingualism, It Is A Powering In Young Learners In Pematang Siantra Trough Teaching And Learning Process. Bilingual: Jurnal Pendidikan Bahasa Inggris, 2(1), 25-30

Erya, Y., Oktaviani, R., & Wijayanti, R. (2021). Improving Reading Comprehension Through Mind Mapping Technique. Journal of Language and Literature Education, 9(2), 110–   118.

Girsang, S. E. E., & Chadijah, S. (2022). The Strategies Of The Teacher In Motivating The Students In Learning English At Eleventh Class Study Of MA AL Hasyimiyah Academic Year 2020/2021. Bilingual: Jurnal Pendidikan Bahasa Inggris, 4(1), 69-74

Girsang, S. E. E., Damanik, I. J., & Sihotang, R. (2023). The Influence Of Using Peer Assisted Learning Strategies (Pals) Towards Students Achievement In Reading Comprehension At The SMPN 7 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(2), 145-152

Girsang, S. E. E., Damanik, I. J., & Sihotang, R. (2023). The Influence Of Using Peer Assisted Learning Strategies (Pals) Towards Students Achievement In Reading Comprehension At The SMPN 7 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(2), 145-152

Jayanti, I., & Nasution, Y. K. (2022). The Effectiviness Of Applying KWL (Know, Want, Learn) Strategy On Reading Comprehension At SMP NEGERI 4 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 4(2), 152-158

Matondang, M. K. D., & Sukma, U. M. (2023). The Teacher's Strategy In Teaching Reading Comprehension At SMP Swasta Mardi Wiyata Utama Gunung Bayu. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(1), 25-34

Purba, A., & Girsang, S. (2022). The Effect of Using Zoom Application in English Learning for IPS Tenth Grade in SMA Negeri 3 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 4(1), 62-68

Purba, A., & Simbolon, W. B. (2020). The Use Of PQRST (Preview – Question – Read – State - Test) Technique To Improve Students'Reading Comprehension Ability. Bilingual: Jurnal Pendidikan Bahasa Inggris, 2(2), 78-84

Purba, B., & Rini, M. (2021). Improving The Students'reading Comprehension By Using Comic Strips At Smamuhammadiyah-7 Serbelawan Grade XI. Bilingual: Jurnal Pendidikan Bahasa Inggris, 3(2), 64-74

Purba, R., & Sitio, F. I. (2020). Improving The Students'Reading Comprehension On Narrative Text By Using Buzz Group Technique At Grade VII OF SMP Yayasan Perguruan Keluarga Pematangsiantar Academic Year 2019/2020. Bilingual: Jurnal Pendidikan Bahasa Inggris, 2(1), 31-37

Silalahi, M., & Sary, Y. W. (2020). The Using Of Two Stay Two Stray (TSTS) Strategy On Students'Reading Comprehension. Bilingual: Jurnal Pendidikan Bahasa Inggris, 2(2), 70-77

Silalahi, T. F., Purba, A., & Septi, R. D. (2023). The Use Of Problem Based Learning (PBL) To Increase Students' Achievement In Reading Comprehension At The Eight Grade Of Smp Swasta Prama Artha. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(2), 107-111

Silalahi, T. F., Purba, A., & Septi, R. D. (2023). The Use Of Problem Based Learning (PBL) To Increase Students' Achievement In Reading Comprehension At The Eight Grade Of Smp Swasta Prama Artha. Bilingual: Jurnal Pendidikan Bahasa Inggris, 5(2), 107-111

Sipayung, R., & Pardede, L. (2021). An Analysis Of English Teachers'strategies One-Learning Classes During Covid-19 At Smk Negeri 1 Pematangsiantar. Bilingual: Jurnal Pendidikan Bahasa Inggris, 3(2), 75-85

Sugiono. (2014). Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta.

Sukardi. (2007). Metodologi Penelitian Pendidikan: Kompetensi dan Praktiknya. Jakarta: Bumi Aksara.

Tatipang, D. P., Kumajas, E., & Rindengan, S. (2022). The Use of Mind Mapping in Teaching English Reading Skill. Journal of Education and Learning, 6(3), 120–130.