

## **THE EFFECT OF MIND MAPPING TECHNIQUE ON STUDENT'S ABILITY IN COMPREHENDING NARRATIVE TEXT AT EIGHT GRADE OF SMP NEGERI 12 PEMATANG SIANTAR**

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### **Abstrak**

Tujuan dari penelitian ini adalah untuk mengetahui Pengaruh Teknik Mind Mapping Terhadap Kemampuan Siswa Dalam Memahami Teks Narasi Pada Kelas VIII Smp Negeri 12 Pematang Siantar. Hal ini menggabungkan metode research kuantitatif dengan design quasi-experimental. Metode Quasi-experimental adalah definitive because researcher treat samples secara berbeda dan membandingkan effects pada sampel tersebut. Dengan menggunakan teknik purposive sampling, sampel yang akan digunakan dalam penelitian ini terdiri dari dua kelas, yaitu VIII-3 untuk kelas experimental dan VIII-9 untuk kelas kontrol di SMP Negeri 12 Pematang Siantar. Data ini diperoleh dari hasil penelitian para siswa sebelum dan sesudah penelitian. Researcher menemukan bahwa penggunaan Teknik Pemetaan Pikiran mempunyai dampak yang besar terhadap kemampuan siswa dalam menggunakan telepon. Secara khusus mereka menemukan struktur umum cerita yang berhubungan dengan kelas VIII di SMP Negeri 12 Pematang Siantar. Teknologi Pemetaan Pikiran juga membantu siswa dalam memahami materi, membuat siswa lebih aktif di kelas, dan menciptakan suasana belajar yang cerdas bagi siswa. Dengan tingkat signifikansi sebesar 5% maka nilai T-hitung lebih besar dibandingkan T-tabel (2,41 lebih tinggi dari 1,672), dan nilai rata-rata pasca-test untuk kelas experimental adalah 78,16 dan skor rata-rata pasca-test untuk kelas kontrol adalah 64,66. Standar deviasi pasca-test untuk kelas experimental adalah 8,52, dan standar deviasi pasca-test untuk kelas kontrol adalah 9,07. Kesalahan standar dari mean difference adalah 5.32. Hal ini juga menunjukkan bahwa ( $H_0$ ) adalah rejected dan ( $H_a$ ) adalah accepted.

**Kata kunci:** Teknik Mind Mapping; Kemampuan Siswa; Memahami Teks Narasi

### **Abstract**

*The aim of this research is to determine the effect of mind mapping techniques on students' ability to understand narrative texts in class VIII of SMP Negeri 12 Pematang Siantar. It combines the quantitative research method with the qualitative design-experimental. The Quasi-experimental method is definitive because researcher treat samples differently and compare effects on those samples. By using a purposive sampling technique, the sample that will be used in this research consists of two classes, namely VIII-3 for the Experimental class and VIII-9 for the control class at SMP Negeri 12 Pematang Siantar. This data was obtained from the results of students' research before and after the research. Researcher found that the use of Mind Mapping Technique had a major impact on students' ability to use the telephone. In particular, they found the general structure of stories related to class VIII at SMP Negeri 12 Pematang Siantar. Mind Mapping technology also helps students understand the material, makes students more active in class, and creates an intelligent learning atmosphere for students. With a significance level of 5%, the T-calculated value is greater than the T-table (2.41 higher than 1.672), and the post-research average score for the experimental class is 78.16 and the post-research average score for the control class is 64.66. The standard error of mean difference is 5.32. It also shows that ( $H_0$ ) is rejected and ( $H_a$ ) is accepted.*

**Keywords:** Mind Mapping Technique; Student's Ability; Comprehending Narrative Text

## INTRODUCTION

English is studied by many people from various countries, both as a second language and as a foreign language. This is because, as an international language, it plays an important role in global communication as it allows us to communicate with people from different countries and gain additional knowledge due to the many references written in this language all over the world. Apart from its national language, Indonesia has many local languages, such as mother tongue and foreign languages (Yuniarti, Abadi, & Wiyasa, 2019). Apart from its national language, Indonesia has many local languages, such as mother tongue and foreign languages. English is a foreign language that must be studied from junior high school to college. This is due to the fact that English is very important in everyday life. Currently, the qualification requirement for this position is that applicants must master English well, both orally and in writing. This is why students want to learn English.

Four basic skills must be mastered to master English well: reading, writing, speaking, and listening. One important ability is reading. Reading is related to how the reader understands the author's intentions. English can be learned through reception (listening and reading) and production (speaking and writing). One of the most important skills that must be understood well is reading. Afflerbach (2007:12) states that reading is a dynamic and complex process that requires abilities, strategies and skills. Apart from that, readers who only understand a group of words in a sentence will not be enough to understand the process. If they want to understand text messages and information, they have to understand them. Students who have good reading skills improve their ability to gather ideas and communicate. Apart from that, the reading process requires understanding. When readers fully understand the text, they will understand it. According to Nuttall (1982:17), the goal of reading comprehension is part of the reading comprehension process. This process is demonstrated by reading the message and the meaning of the text being read. Apart from that, the message or meaning can be in the form of information, knowledge, or even an expression of happiness or sadness (M. Iqbal Al-Afghany, Gunawan Ikhtiono, 2021).

The 2013 curriculum stipulates that the aim of teaching reading to junior high school students is to enable students to understand the main concepts of texts, vocabulary, and some information related to the texts they read. Therefore, students must master the elements of reading comprehension so that they can understand the text. If the reader can understand the writer's message, this process can be carried out. Therefore, for students to understand the texts they read, they must have good reading skills (Setyarini, 2019). Eighth grade students must understand the reading material well because they will face the final exam in this class. It is estimated that students analyze various types of genre texts, including descriptive, report, narrative, recount, and procedural, to study the content and find the main idea, social purpose and function, general structure, linguistic characteristics, and answers to specific questions (Variansi & Gede Agung, 2020).

Based on the experience of the researcher's teaching practice and when the researcher interviewed several grade 8 students, during the learning of grade 8 students at SMP Negeri 12

Pematang Siantar, students still experienced difficulties in understanding the text. They had done many reading exercises in the previous class, but they faced difficulties in reading the English texts, especially the narrative text that appeared in Grade 8 textbook classes and their final exam questions they only received 71 on the KKM's English scale, which is the average. They said that the text was longer and louder to understand. They were confused in understanding the characteristics of the text, including its social, generic, and language functions. Neither are they familiar with the meaning of the new vocabulary. Besides, they think that they do not know what to do when reading material and just wait for the teacher's explanation to understand the text. As a result, they believed that reading texts is a boring activity (Silaban, Mahulae, & Silaban, 2020).

The following is a list of English class scores from the two classes I entered during my practical teaching experience (Lestari, 2018). This problem must be solved to improve students' reading skills and to them easier understand the text (Suhada, Bahu, & Amali, 2020).

The Mind-Mapping technique is an effective method to use to overcome the above problems. The Mind Mapping technique helps students in this case in understanding the text. Mind mapping, according to Buzan (2007), is a two-dimensional recording method that uses all relevant knowledge to create a mind map. We can optimize our brain power by mapping keywords or picture words (that is, words that succinctly summarize a particular element and serve as a basis for further connections) with pictures, images, and colors. This is supported by several relevant studies, such as Patria et al. (2019) and Karolina, (2019), who researched how mind mapping techniques helped students read narrative texts (FITRI, 2022). They found that this technique was effective in improving students' ability to read narrative texts and showed that using mind maps helped students understand texts more easily. Apart from that, research conducted by Novianti et al. (2020) found that Mind Mapping is a good and usable learning method. After that, it was used in broader educational research (Zean, 2020).

Based on the phenomenon above, the researcher is interested to make a research entitled, "The Effect Of Mind Mapping Technique On Student's Ability In Comprehending Narrative Text At Eight Grade Of Smp Negeri 12 Pematang Siantar".

## **METHOD**

This study uses a quantitative research method with a quasi-experimental design. Quasi-experimental methods are definitive because researcher treat samples differently and compare the effects on the samples (Fraenkel et al., 2012). This research will be used to find out the effect that occurs when a class uses the Mind-Mapping Technique when learning to read narrative text in comparison to a class that uses a conventional Technique. The research design used in this study is the nonequivalent control group design. The basis for choosing this research design is that the sample selection will use a purposive sampling technique. This research will use two sample classes that have different treatments, namely the experimental class and the control class. Before the experiment, both classes will be given the same pre-test (ACHMADI, 2019). Furthermore, the experimental class will be treated using the Mind-Mapping Technique. While the control class will be

given treatment using conventional techniques, after the two classes carry out the learning process, they will be given the same post-test. Then, the post-test results of the experimental class will be compared with those of the control class (Holyfield, Light, Drager, McNaughton, & Gormley, 2018).

This research will be conducted at SMP Negeri 12 Pematang siantar which is located at JL. Sibolga, No.25 Pematang siantar, North Sumatra in the new academic year, the 2023/2024 school year, which is planned to be held from September to October 2023. Population can be defined as all members of a clear class of individuals, events, or objects (Ary et al., 2014). This research will utilize all class VIII students of SMP Negeri 12 Pematang Siantar in the 2023/2024 academic year, consisting of 9 classes with an average of 30 students per class. There are around 276 students in class VIII. The sample is part of the number and characteristics possessed by a population (Ary et al., 2014). In this research, the sampling technique used is purposive sampling technique. By using purposive sampling technique, the sample to be used in this research consisted of two classes, namely VIII-3 for the experimental class and VIII-9 for the control class at SMP Negeri 12 Pematang siantar (Kissi, Nat, & Armah, 2018).

The research instrument is a tool in research that serves to measure the variables to be studied. The research instrument also serves to retrieve data that will be used as material for processing the results of the research. In short, research instruments are tools used to obtain research data. In preparing the research instrument, the researcher decided to give 20 multiple-choice questions on the reading test to be used for both the pre-test and post-test. The results will be used to determine the significance of the effect of students' reading comprehension in narrative text using the Mind-Mapping Technique. This test will be given to the experimental class and the control class (Hanif, 2016).

Once all the necessary data is collected, data analysis will be carried out. The learning results obtained from the list of pre-test and post-test material values will be used for data analysis. Two groups of data consist of an experimental group and a control group. The following formula shows the variable average, standard deviation, and t-test formula.

## **RESUT AND DISCUSSION**

### **Data Analysis**

Tests are tools used to collect data. Data comes from students' reading scores in this study; simply by calculating the total score of correct answers, this score is obtained. To collect data, researchers gave an exam to class VIII students of SMP Negeri 12 Pematang Siantar which involved understanding narrative text with multiple choices. Next, the researcher used the formula mentioned in chapter III to analyze student grades.

### **The students' scores of Pre-test and Post-test in Experimental Class**

The experimental class for this research consisted of 30 students in class VIII-3 of SMP Negeri 12 Pematang Siantar. Mind Mapping Technique used to teach in experimental class.

**Table 1. Score of the Pre-test and Post-test in Experimental Class.**

No.	Name of Students	Pre-Test (X)	Post-Test (Y)
1	Adinda Z. Rizky	35	75
2	Alwan Fauzan	45	70
3	Amanda A. Putri	40	80
4	Apri S. Panjaitan	35	90
5	Celine E. Purba	55	75
6	Christie D.C. Panjaitan	45	85
7	Geisha Z.L Marpaung	35	70
8	Glorya M. Simanjuntak	30	75
9	Idylla Sascia	30	65
10	Jelita A. Siriongringo	30	60
11	Keisyia Aulia	40	85
12	Keyzia Z. Tambunan	30	75
13	Kesya A.M. LumbanToruan	40	70
14	Lutfa Faizila	35	75
15	Maria F. Simangunsong	35	60
16	Marsha M.R. Siahaan	50	90
17	Moreno S. Saragih	30	85
18	Mutia Asifa	50	85
19	Mustika P. Sidabalok	40	75
20	Nur Hidayah	40	75
21	Olyvia S.C. Saragih	70	95
22	Paulus V. Manullang	30	70
23	Pebriany Siregar	45	85
24	Priskia Y. Pangaribuan	50	90
25	Putra E. Panjaitan	25	70
26	Putri A. Simbolon	55	90
27	Sheiramothy Damanik	40	85
28	Syfah R. Marpaung	35	70
29	Yohana Siallagan	70	90
30	Zefanya P. Sianturi	35	80
	$\Sigma$	1225	2345
	MEAN	40,83	78,16

Based on the Table the pre-test and post-test scores showed that, in the pre- test there was not student who achieved the KKM score of 71. The score in the table also showed that the total pre-test score in the experimental class was 1225 and the average score was 40,83. Meanwhie, in the post-test results, there were 21 students who scored above the KKM score of 71 and 9 students

who did not reach the KKM. The table also showed that the total score of the experimental class was 2345 and the average score was 78,16.

### The Variance and Standard Deviation in Post-Test Experimental

**Table 2. The Variance and Standard Deviation in Post-Test Experimental**

No.	Students	Score (X)	Mean (X)	Difference (X-X)	Difference Squared (X-X) <sup>2</sup>
1	Adinda Z.	75	78,16	-3,16	9,9856
2	Alwan Fauzan	70	78,16	-8,16	66,5856
3	Amanda A	80	78,16	1,84	3,3856
4	Apri S	90	78,16	11,84	140,1856
5	Celinee. Purba	75	78,16	-3,16	9,9856
6	Christie P	85	78,16	6,84	46,7856
7	Geisha Z.L	70	78,16	-8,16	66,5856
8	Glorya M. S	75	78,16	-3,16	9,9856
9	Idylla Sascia	65	78,16	-13,65	13,6161
10	Jelita S	60	78,16	-18,16	186,3225
11	Keisya Aulia	85	78,16	6,84	46,7856
12	Keyzia Z	75	78,16	-3,16	9,9856
13	Kesya L	70	78,16	-8,16	66,5856
14	Lutfu Faizila	75	78,16	-3,16	9,9856
15	Maria F. S	60	78,16	-18,16	186,3225
16	Marsha M.R	90	78,16	11,84	140,1856
17	Moreno S	85	78,16	6,84	46,7856
18	Mutia Asifa	85	78,16	6,84	46,7856
19	Mustika P. S	75	78,16	-3,16	9,9856
20	Nur Hidayah	75	78,16	-3,16	9,9856
21	Olyvia S.C	95	78,16	16,24	263,7376
22	Paulus V. M	70	78,16	-8,16	66,5856
23	Pebriany S	85	78,16	6,84	46,7856
24	Priskia Y. P	90	78,16	11,84	140,1856

25	Putra E. P	70	78,16	-8,16	66,5856
26	Putri A. S	90	78,16	11,84	140,1856
	Sheiramothy		78,16		
27	D	85		6,84	46,7856
28	Syfah R. M	70	78,16	-8,16	66,5856
29	Yohana S	90	78,16	11,84	140,1856
30	Zefanya P. S	80	78,16	1,84	3,3856
				$\sum (X-X) = \sum D^2$	2107,824

The sum of squared times after the test for the experimental class is 21,078,243, according to the data in Table 4.3. To determine the standard deviation of the experimental class post-test and compare it with the control class post-test data, these points are needed.

#### Finding out t-test

$$T_{\text{test}} = \frac{\bar{X}_e - \bar{X}_c}{SE(X^e - X^c)}$$

$$T_{\text{test}} = \frac{78,16 - 64,66}{5,32}$$

$$T_{\text{test}} = \frac{13,5}{5,59} = 2,41$$

#### Finding out the degree of freedom (df) as follow:

$$df = (N_e + N_c)$$

$$df = (30 + 30) - 2$$

$$df = 60 - 2 = 58$$

Based on the previously designed hypothesis formula, the T-table at the 5% significance level is 1.672; The hypothesis is not rejected if the t-test is greater than the t-table in question. Therefore, the hypothesis is built as follows: the t-test is greater than the t-table at the 5% significance level, 2.41 is greater than 1.672 (Reyes-Chua & Lidawan, 2019). The null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted because the t-test value (2.41) is greater than the table value (1.672) at the 5% significance level for a two-sided test.

#### Research Findings

Based on the data analysis, it is found that there is an effect of using Mind-Mapping Technique grade eight students's ability in comprehending of narrative text at SMP Negeri 12 Pematang Siantar. The researcher found some findings as follows:

1. The students' scores in experimental class which is taught by using Mind-Mapping Technique higher than the student's score in control class. It can be proved from the mean of post-test in experimental class is 78,16 and the mean of post-test in control class is 64,66
2. The post-test experimental class has 2345 squares of respondents.
3. The post-test control class has 1940 square of respondents.

4. The post-test experimental class has 8,52 standard deviation
5. The post-test control class has 9,91 standard deviation
6. The standard error of experimental class and control class was 5,59
7. The t-table at a level significance of 5% for a two-tailed test was 1,672 and the degree of freedom (df) was 58.

The testing hypothesis is accepted which t-test is higher than t-table ( $2,41 > 1,672$ ) at the level of significance 5%. It shows that using using Mind-Mapping Technique on grade eight students was significantly at SMP Negeri 12 Pematang Siantar.

## **Discussions**

After conducting research at this location, researchers found significant differences between students at SMP Negeri 12 Pematang Siantar. The results show that students have significantly different comprehension scores before and after being taught with the Mind-Mapping Technique (Rahmadani, Pammu, & Nasmilah, 2021). This method can improve students' ability to understand stories. Researchers conducted tests before and after the mind-mapping technique to determine its effects (Pratiwi & Nur, 2019). However, researchers have limited time to use mind mapping techniques because the time needed to carry out pre-reading activities to utilize the reader's prior knowledge, the learning process, and post-reading activities does not match the number of lesson hours. As a result, learning can be accelerated (Munthe, 2020).

Researcher also found the weaknesses and advantages of using the Mind-Mapping Technique as a learning method. The weakness that researchers found was that students lacked confidence in expressing their background knowledge. To overcome this weakness, researchers provide direction and guidance to improve students' understanding and mastery and encourage them to participate more actively in reading in class (HASANI & RASOULI, 2015).

In this research, the researcher used two classes as the sample that consists of 30 students of each class. One class was chosen to be the experimental group and this group received treatment by using Mind-Mapping Technique in comprehending and the other one as the control group received a different treatment or without Mind-Mapping Technique (Derakhshan & Khatir, 2015).

Researchers conducted before and after tests to find out whether or not the mind mapping technique could improve students' story understanding (Ho, Thien, An, & Vy, 2020). The test consists of twenty multiple choice questions. Researchers use interpretive reading comprehension, which includes identifying conclusions from the text, looking for details, finding references, and understanding the text with a broad vocabulary (Harahap, Sari, Ramadhani, Safriyani, & Harahap, 2020).

From the analysis of the data, the researcher found that the mean of pretest in experimental class was 40,83 and the mean of post-test in experimental class was 78,16 and the mean of pre-test in control class was 55,66 and the mean of post-test in control class was 64,66. Then, T- test was higher than T-table ( $2,41 > 1,672$ ) at the level of significant was 5% with  $df = 60 - 2 = 58$ , it means that there was effect of using Mind-Mapping Technique in comprehending on grade eight students' at SMP Negeri 12 Pematang Siantar in narrative text.

After applying the Mind-Mapping Technique in the experimental and conventional classes, the researcher found that the Mind-Mapping Technique helped students show diverse opinions. This was different from the conventional class where only a few students expressed their opinions. Mind-Mapping Technique also increased students' critical thinking and engagement in understanding the subject matter (WILDANI, 2021). In an effort to improve students' ability in comprehending, future researchers were advised to extend the duration of the study so that the results are more satisfactory. By continuing to develop the Mind-Mapping Technique, teachers and researchers can support student's ability in comprehending skills and creating an inclusive and interactive learning environment.

## CONCLUSION

Researcher found that the use of Mind-Mapping Techniques had a major impact on students' ability to understand text. Specifically, they discovered the general structure of stories read in class VIII at SMP Negeri 12 Pematang Siantar. Mind-Mapping techniques also help students understand lesson material, make students more active in class, and create an interesting learning atmosphere for students. With a significance level of 5%, the T-calculated value is greater than the T-table (2.41 greater than 1.672), and the average post-test score for the experimental class is 78.16 and the average post-test score for the control class is 64.66. The post-test standard deviation for the experimental class was 8.52, and the post-test standard deviation for the control class was 9.07. The standard error of the mean difference is 5.32. It also showed that ( $H_0$ ) was rejected and ( $H_a$ ) was accepted.

## REFERENCES

- Achmadi, S. A. (2019). *The Effect Of Silent Viewing Activity On Student's Speaking Ability At The First Grade Of Sman 1 Kampak Trenggalek*. Retrieved From [Http://Repo.Uinsatu.Ac.Id/Id/Eprint/11937](http://Repo.Uinsatu.Ac.Id/Id/Eprint/11937)
- Derakhshan, A., & Khatir, E. D. (2015). The Effects Of Using Games On English Vocabulary Learning. *Journal Of Applied Linguistics And Language Research*, 2(3), 39–47.
- Fitri, R. D. (2022). *The Effect Of Using Animation Video As Audio-Visual Media Toward Students'speaking Skill At The Tenth Grade Of Sman Plus Riau Province*. Universitas Islam Negeri Sultan Syarif Kasim Riau. Retrieved From [Http://Repository.Uin-Suska.Ac.Id/Id/Eprint/60801](http://Repository.Uin-Suska.Ac.Id/Id/Eprint/60801)
- Hanif, H. (2016). Using Rosetta Stone Software As Media In Teaching English Vocabulary (An Experimental Study At Sdn No. 02 Lhoksukon). *Getsempena English Education Journal*, 2(1), 217667.
- Harahap, N., Sari, S. M., Ramadhani, Y. R., Safriyani, R., & Harahap, R. (2020). *Using Rosetta Stone Media Through The Dynamic Immersion Method To Improve Vocabulary Mastery For Junior High School Students*. Retrieved From [Http://Repository.Uinsa.Ac.Id/Id/Eprint/231](http://Repository.Uinsa.Ac.Id/Id/Eprint/231)
- Hasani, M. T., & Rasouli, M. (2015). Comparison Of Rosetta Stone English Software Vs. Tell Me More English Software On Iranian Efl Student Achievement Toward English Learning. *Cumhuriyet*

*Universitesi Fen Edebiyat Fakültesi Fen Bilimleri Dergisi*, 36(3), 1239–1246.

- Ho, P. V. P., Thien, N. M., An, N. T. M., & Vy, N. N. H. (2020). The Effects Of Using Games On Efl Students' Speaking Performances. *International Journal Of English Linguistics*, 10(1), 183–193.
- Holyfield, C., Light, J., Drager, K., Mcnaughton, D., & Gormley, J. (2018). Effect Of Aac Partner Training Using Video On Peers' Interpretation Of The Behaviors Of Presymbolic Middle-Schoolers With Multiple Disabilities\*. *Augmentative And Alternative Communication*, 34(4), 301–310. <https://doi.org/10.1080/07434618.2018.1508306>
- Kissi, P. S., Nat, M., & Armah, R. B. (2018). The Effects Of Learning–Family Conflict, Perceived Control Over Time And Task-Fit Technology Factors On Urban–Rural High School Students' Acceptance Of Video-Based Instruction In Flipped Learning Approach. *Educational Technology Research And Development*, 66(6), 1547–1569. <https://doi.org/10.1007/S11423-018-9623-9>
- Lestari, I. (2018). Penerapan Model Pembelajaran Mind Mapping Dalam Metode Quantum Learning Untuk Meningkatkan Hasil Belajar. *Edudikara: Jurnal Pendidikan Dan Pembelajaran*, 3(3), 231–239. <https://doi.org/10.32585/Edudikara.V3i3.5>
- M. Iqbal Al-Afghany, Gunawan Ikhtiono, S. (2021). Model Mind Mapping Terhadap Hasil Belajar Siswa Mata Pelajaran Akidah Akhlak. *Jurnal Penelitian Pendidikan Sosial Humaniora*, 6(1), 25–31. <https://doi.org/10.32696/Jp2sh.V6i1.717>
- Munthe, Y. Y. (2020). *Utilizing Rosetta Stone Application To Improve Students' Vocabulary Mastery At The Tenth Grade Of Swasta Tunas Bangsa Senior High School*. Universitas Islam Negeri Sumatera Utara. Retrieved From <http://repository.uinsu.ac.id/id/eprint/11125>
- Pratiwi, W. R., & Nur, M. A. (2019). The Use Of Board Race Game In Improving Students' Vocabulary Mastery At Second Grade Of Tsanawiyah Babul Khaer Bulukumba. *Klasikal: Journal Of Education, Language Teaching And Science*, 1(3), 75–86.
- Rahmadani, F., Pammu, A., & Nasmilah, N. (2021). The Use Of Board Race Games Toward The Improvement Of Students Vocabulary's Memorization At The First Year Students Of English Education Department At Uin Alauddin Makassar. *Jurnal Ilmu Budaya*, 9(1), 204–211. <https://doi.org/10.34050/jib.v9i1.12620>
- Reyes-Chua, E., & Lidawan, M. W. (2019). Games As Effective Language Classroom Strategies: A Perspective From English Major Students. *European Journal Of Foreign Language Teaching*. <https://doi.org/http://dx.doi.org/10.46827/ejfl.v0i0.2366>
- Setyarini, D. (2019). Metode Pembelajaran Mind Map Untuk Meningkatkan Prestasi Belajar Anak Didik Sekolah Dasar. *Jurnal Ilmiah Pendidikan Dasar*, 6(1), 30. <https://doi.org/10.30659/pendas.6.1.30-44>
- Silaban, R., Mahulae, S., & Silaban, P. (2020). Pengaruh Model Pembelajaran Mind Mapping Terhadap Hasil Belajar Kelas Iv Di Sd Budi Luhur. *Jurnal Educatio Fkip Unma*, 6(2), 308–313. <https://doi.org/10.31949/educatio.v6i2.451>
- Suhada, S., Bahu, K., & Amali, L. N. (2020). Pengaruh Metode Pembelajaran Mind Map Terhadap Hasil Belajar Siswa. *Jambura Journal Of Informatics*, 2(2), 86–94. <https://doi.org/10.37905/jji.v2i2.7280>

- Variani, N. L. D., & Gede Agung, A. A. (2020). Model Pembelajaran Discovery Learning Berbantuan Media Mind Mapping Terhadap Hasil Belajar Ipa Siswa Kelas V. *Jurnal Pedagogi Dan Pembelajaran*, 3(2), 290. <https://doi.org/10.23887/jp2.v3i2.26631>
- Wildani, H. (2021). *The Effect Of Rosetta Stone Application On Students' vocabulary Mastery*. Universitas Siliwangi. Retrieved From [Http://Repositori.Unsil.Ac.Id/Id/Eprint/5530](http://Repositori.Unsil.Ac.Id/Id/Eprint/5530)
- Yuniarti, D., Abadi, I. B. G. S., & Wiyasa, I. K. N. (2019). Pengaruh Model Student Teams Achievement Divisions (Stad) Berbantuan Media Mind Mapping Terhadap Hasil Belajar Ips Siswa Kelas V Sd Gugus Iii Kuta Utara Badung Tahun Ajaran 2017/2018. *Mimbar Pgsd Undiksha*, 7(1). <https://doi.org/10.23887/jjpsd.v7i1.16970>
- Zean, R. N. (2020). *The Influence Of Using Freeze Framing Technique To Ward The Students' Writing Narrative Text At The Eighth Graders Of Smpn 9 Metro*. Iain Metro. Retrieved From <https://repository.metrouniv.ac.id/Id/Eprint/1487>