

# Rafly

*by Rafly Rafly*

---

**Submission date:** 12-Jun-2023 06:59AM (UTC+0700)

**Submission ID:** 2113920534

**File name:** REVISI\_ARTIKEL\_RAFLY\_DONE.docx (153.19K)

**Word count:** 4005

**Character count:** 21340



---

**Does Mind Mapping Improve Students Reading Comprehension in English Class for Young Learners?**

**Apakah Mind Mapping Meningkatkan Pemahaman Membaca Siswa di Kelas Bahasa Inggris untuk Pelajar Muda?**

Muhammad Rafly Fitrawantono  
198820300030

Dosen Pembimbing  
Yuli Astutik, M.Pd

Dosen Penguji  
Yuli Astutik, M.Pd  
Niko Ferdianto, M.A.

**Progam Studi Pendidikan Guru Sekolah Dasar  
Fakultas Psikologi dan Ilmu Pendidikan  
Universitas Muhammadiyah Sidoarjo  
Januari, 2023**

**Abstract** Many students in Sidoarjo public schools, especially in elementary school classes, still have difficulty understanding what is read in class. Therefore, the purpose of this research is to find out whether the application of the Mind Mapping Technique can improve students' reading comprehension or not. This research was conducted at Temu 2 Prambon Elementary School. The sample in this study was 20 students in class VI for the 2022–2023 school year. The research design was pre-experimental with a one-group pretest and posttest design. One group was tested twice using questions (pre-test and post-test), and data was collected, processed, and analyzed using the Excel and SPSS 26 programs with the Shapiro Wilk and Man Whitney test for normality because the data were not normally distributed. Then the data were analyzed by comparing the results of the average pre-test and post-test scores. The results of the study found that the average value of the post-test (T2) was higher (68.5) compared to the results of the average pre-test (T1). The results obtained are significant because of an increase in values before and after treatment. This leads to the conclusion that the use of the mind map method in the teaching process can also help students overcome reading comprehension problems and simultaneously improve their reading comprehension.

**Keywords** - Education, Teaching English Young Learners, Teaching Reading, Reading Comprehension, Mind Mapping

**Abstrak.** Banyak siswa di sekolah negeri Sidoarjo, terutama di kelas SD, masih kesulitan memahami apa yang dibacakan di kelas. Oleh karena itu, tujuan dari penelitian ini adalah untuk mengetahui apakah penerapan Teknik Pemetaan Pikiran dapat meningkatkan pemahaman membaca siswa atau tidak. Penelitian ini dilakukan di SDN Temu 2 Prambon. Sampel dalam penelitian ini adalah siswa kelas VI tahun ajaran 2022–2023 yang berjumlah 20 siswa. Desain penelitian ini adalah pre-experimental dengan desain one-group pretest and posttest design. Satu kelompok diuji dua kali menggunakan soal (pre-test dan post-test), dan data dikumpulkan, diolah, dan dianalisis menggunakan program Excel dan SPSS 26 dengan pengujian normalitas shapiro wilk dan man whitney u test karena data tidak berdistribusi normal. Kemudian data dianalisis dengan membandingkan hasil rata-rata skor pre test dan post test. Hasil penelitian menemukan bahwa nilai rata-rata post-test (T2) lebih tinggi (68,5) dibandingkan dengan hasil nilai rata-rata pre-test (T1). Hasil yang diperoleh signifikan karena adanya peningkatan nilai sebelum dan sesudah perlakuan. Hal ini mengarah pada kesimpulan bahwa penggunaan metode peta pikiran dalam proses pengajaran juga dapat membantu siswa mengatasi masalah pemahaman membaca dan sekaligus meningkatkan pemahaman membaca mereka.

**Kata Kunci** – Pendidikan, Pengajaran Pelajar Muda Bahasa Inggris, Pengajaran Membaca, Pemahaman Membaca, Mind Mapp

## INTRODUCTION

Education is the most important aspect of life, everyone has the right to get an equal and proper education. [1] Most cultures demand more and more of education, to ever-higher standards, with more accountability and limited resources. Education has the main goal of always educating and developing knowledge, forming the character and mindset of everyone, and shaping everyone's personality. [2] It's important to continue learning and improving educational quality since both the process and the outcome are important. [3] Giving pupils information and skills is crucial for other parts of their development.

We can get education from the teaching and learning process, by teaching we can transfer the knowledge we get to others. [4] In comparison to kids who merely take in what we teach them, active learners tend to comprehend more, pick up more information, retain it longer, enjoy it more, and be better able to see the importance of what they have learned. The role of the teacher is very much needed in this activity because the teacher's position as a creator or maker makes students smarter with various ways of teaching, one of which is teaching reading. [5] Anyone who learns to read will be empowered because they will be able to access the wealth of information contained in printed materials and, in the end, contribute to that knowledge. [6] Many educators think they can impart reading abilities to children by having them read a book first, then demonstrating to them how to use a range of skills to understand it better.

[7] Learners should develop goals for their reading in order to become excellent readers; as a result, good readers have a reason for reading. To adapt their classes to their students' evolving skills, teachers must be aware of their students' development and be aware of how they are progressing. [8] People with good working memory and those with low working memory used similar cognitive processing strategies when reading for enjoyment. [9] A portion or component of written communication, reading is one of the four fundamental language abilities. [10] Effective reading methods are regarded as key abilities that have gotten extra attention for pupils' reading comprehension abilities.

Successful readers make an effort to use a variety of techniques to comprehend the meaning of the text. [11] Comprehension is a process by which the reader creates meaning by responding to the text using a combination of information from the text, information from the reader's own prior knowledge and experiences, and information from their own opinions in relation to the text. English is a foreign language that we must master whether we like it or not because when someone is able to master English even a little bit, it will be an added value for that person. Teaching English for young learner is considered very good because at a young age we can learn many things related to curiosity and a deep desire to know about many things. [12] Young children create their own learning by investigating the immediate area and participating in the learning process of their surroundings.

Especially when teaching young learner reading comprehension, there are many different strategies to teach learning materials. [13] Learning method is an operational step of the learning strategy chosen to achieve learning objectives. There are many models and ways to apply learning methods, one of which is the mind mapping learning method, Mind mapping or in general what we usually call mind maps or concept maps is a method of creative recording to make it easier for us to remember what we see and then put it into writing with varied and imaginative notes. [14] Mind maps are a creative and efficient approach to capture knowledge since they are the simplest way to get information from the brain. [15] By using mind mapping, the visual information that the brain has received is then completely explained to produce a holistic notion.

Based on the results of observations and interviews with class teachers when teaching English in the sixth grade of SD Negeri Temu 2 Prambon. It is known that students' reading comprehension skills in English lessons are currently still very low, and also the teacher's learning model still uses the lecture method, Mind mapping has never been used. This can be proven when researchers observe the teacher's teaching process in class and when the teacher gives English reading texts, there are still many students who understand the meaning of the reading and vocabulary. Based on the problems in reading, it is known that the goals of language learning are very far from what is expected, especially in the subject of reading comprehension in English.

There are fifth previous research related to this research. [16] Found that There's still a lot going on out there teachers, teacher trainers and content writers who don't use research studies as evidence a practice they see "working for them", informally. As a result, programs and classrooms all around the world incorporate a significant amount of practitioner expertise to support certain teaching philosophies. This information frequently works effectively and aids kids' growth as readers. In reality, a lot of teachers and teacher educators could assert that their own classroom experience and competence in teaching reading have taught them many of the issues mentioned in this paper. Next [17] State that The studies reported here have explored one way to investigate the psychological properties of reading ability. It has suggested how to determine the validity of a reading comprehension test. The results show that reliable tests are needed to measure some of the nine predefined basic skills and workbooks to help improve students' abilities in them. The need to correlate scores on existing reading tests with scores on some of the component principals was apparent. In addition [18] State that In general, English as a foreign language must still be taught to young English learners.

Moreover [19] states that Mind mapping helps students concentrate on remembering information, increases student creativity and makes students enjoy the learning process and trains the left and right brains. [20] State that mind mapping approach, which employs visual reminders by building patterns and linked concepts that are employed for learning, is one of the teaching strategies that can help students improve their capacity for creative thinking. So the link with this research is to examine further about reading comprehension for young English learners using the mind mapping method based on previous research.

Although, the students enjoy the process of instruction given by the teacher. However the use of variation of teaching English to young learner method should be developed. Therefore the researchers of this research want to know the effect of mind mapping in TEYL. Thus the research question that can be formulated in this research is as follow : Does mind mapping affect the reading comprehension of young learner in elementary school?

## **METHODOLOGY**

### **Research Design**

The research in this study is quantitative with a pre-experimental design. [21] In quantitative research, the researchers collect data that is frequently numerical and uses mathematical models as the approach for data analysis. The reason researchers use this design is because it describes the results of research in the form of statistical data. This research will be conducted from January to March.

### **Research Setting**

This research was conducted at SD Negeri Temu 2 Prambon. Precisely in sixth grade by using pre-test and post-test. The pre-test was used to measure students' ability to understand and describe important points from a reading text before being given treatment. Treatment was used to help students understand and describe key points so they can write them down easily. While the post-test was used to measure students' ability to understand reading texts and can describe important points after being given treatment. The test was validated by experts before being tested on students.

### **Population and Sampling**

The population to be used in this study consisted of all sixth graders at SD Negeri Temu 2 Prambon. This research uses all students in classes that have a population below 30 as a sample. [22] It is a random strategy that does not require underlying theories or a predetermined number of participants. The purposive sampling technique, also known as judgment sampling, is the purposeful selection of a participant based on the traits the person possesses. Purposive sampling will be used by researchers, and the class instructor will suggest one class to include in the study.

### **Data Collection**

Pre-test and post-test were used in this study to assess students' learning outcomes. The aim is to find out how much their abilities are before and after receiving treatment. Both results will then be measured using the SPSS 26 program with Shapiro Wilk normality testing and Mann-Whitney U test. This is to assess how effective students can use the Mind Mapping approach in understanding text, especially in the material of describing people and objects.

### **Instrument of The Research**

In research, an instrument can affect the quality of research results. Therefore, every device that will be used to search a problem must be validated first. In this study, instrument validity tests were used. First, the pre-test and post-test validity tests asked experts in the field of English language learning to assess the suitability of the pre-test and post-test for the competencies being measured. Second, the validity of the mind mapping media requires opinions from experts in the field of English to evaluate the mind mapping media used. Third, the validity of learning resources and lesson plans requires input from expert educators in the field of English to assess the suitability and relevance of what is presented according to the competencies achieved. In this research, to measure the reliability of the instrument, a retest was carried out on the same group of students at appropriate time intervals.

### **Data Analysis**

Data collection was carried out through pre-test and post-test. The author gave it to 20 respondents from 6 graders on March 13 for the pre-test and March 25 for the post-test at SD Negeri Temu 2 Prambon, with 10 pre-test questions and 10 post-test questions. The author also analyzed the data using a statistical program and service solutions (SPSS) version 26 to determine: Average value, Shapiro Wilk normality test, Mann-Whitney U test.

To find out the hypothesis of the effect of using the mind mapping method on learning to describe people and objects before and after treatment. The experiment will be tested using the SPSS 26 program. [23] The factors investigated are explained in this data. Correct information will result in conclusions that reflect the current situation. If  $H_0$  Asymp.sig  $> 0.05$  then the hypothesis is rejected and if  $H_a$  Asymp.sig  $< 0.05$  then the hypothesis is accepted. This shows that there is a significant difference between the initial variable and the final variable, this shows that there is a significant effect on the difference in the treatment given.

## Finding and Discussion

The pre-test and post-test data that has been collected is then compiled using Excel and calculated to determine the total value of each student and the average value of each student. Based on the analysis, the value data obtained before treatment (pretest) and after treatment (posttest) can be seen in Table 1.

**Table 1. the average of each student's grades**

No	Nama Siswa	Hasil tes siswa		Kode	Jumlah nilai tiap siswa	Jumlah rata-rata per siswa
		Pretest	Posttest			
1	AAH	50	70	1 2	120	60
2	ARD	30	50	1 2	80	40
3	ANA	60	80	1 2	140	70
4	AMA	60	80	1 2	140	70
5	AM	50	60	1 2	110	55
6	ADA	30	60	1 2	90	45
7	ARS	20	70	1 2	90	45
8	BDH	40	60	1 2	100	50
9	FFRP	50	60	1 2	110	55
10	FDR	40	80	1 2	120	60
11	MNP	60	70	1 2	130	65
12	MRS	40	80	1 2	120	60
13	MAA	30	50	1 2	80	40
14	MHA	70	80	1 2	150	75
15	MMA	60	70	1 2	130	65
16	MSI	60	70	1 2	130	65
17	NSA	70	80	1 2	150	75
18	NAR	60	70	1 2	130	65
19	NLA	60	70	1 2	130	65
20	NL	50	60	1 2	110	55

5

Table 1 shows a total of 20 students with pre-test and post-test results. the highest score from the pretest is 70 and the lowest score is 20. The highest score from the posttest is 80 and the lowest score is 50. The results of the average pretest score are 49.5 and the posttest value is 68.5. The results of the average analysis can be seen in table 2.

**Table 2. the average of all students' pre-test and post-test scores**

Rata-rata Pre - test	49,5
Rata-rata Post - test	68,5

After calculating the mean of all pretest and posttest data, the data in Table 1 were analyzed using the Shapiro Wilk normality test of Statistical Program and Service Solutions (SPSS) version 26. The analytical results are shown in Table 3.

**Table 3. Lilliefors Significance Correction**

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	,218	20	,013	,914	20	,076
Posttest	,210	20	,021	,871	20	,012

It can be seen in table 3. The results of the analysis state that the normality test on the pretest and posttest data in table 1 is not normally distributed because the significance value in the pretest data is 0.076 and also in the posttest data is 0.012. Basis for decision making:

1. if the Sig value is > 0.05, the research data is normally distributed
2. if the Sig value < 0.05 then the research data is not normally distributed.

After being processed using the normality test, the data is then processed using the Man Whitney u test which can be seen in Table 4.

**Table 4. Processed the data using Man Whitney U test**

Test Statistics <sup>a</sup>	
	Hasil tes
Mann-Whitney U	56,500
Wilcoxon W	266,500
Z	-3,973
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000 <sup>b</sup>
a. Grouping Variable: Kode	
b. Not corrected for ties.	

The results of the analysis state that the man whitney u test is known Asymp sig (2-tailed) = 0.000. This means that the research hypothesis (Ha) is accepted. Basis for decision making:

1. If the Asymp sig (2-tailed) value < 0.05 then the hypothesis is accepted

2. If the Asymp sig (2-tailed) value is  $> 0.05$ , the hypothesis is rejected.

Based on the findings in this study, the researcher found that there were significant differences between before and after treatment. Reading comprehension was still low before applying the Mind Mapping Technique and post-test results showed that students' Reading Comprehension could improve by applying the Mind Mapping Technique. Significant influence on students when applied and this can be seen in the pre and post test results of each student. [24] Mind maps help students learn information by forcing them to organize it and add pictures and colors to it. Finally, the results of this study indicate that the Mind Mapping Technique is an effective technique to improve students' Reading Comprehension.

### Discussion

The purpose of this research is to investigate the relationship between mind mapping media and reading comprehension and its impact on reading texts. By explaining this purpose, the researcher can provide the necessary context to understand this media effectively in increasing students' reading comprehension further discussion of these findings.

In this study, it was found there was a significant difference before being given treatment (x) and after being given treatment (y). based on the output of statistical tests it is known that the asymp sig 2 tailed value is  $0.000 < 0.05$ . These findings indicate that changes before being given treatment are consistently associated with changes after being given treatment. the point is that the use of mind mapping media has broad implications and relevance in increasing understanding and memory of the material read.

The results of this study are comparable to relevant previous studies. Research on the Application of Mind Mapping Techniques to Improve Reading Comprehension in Grade VII Middle School Students and Does Mind Mapping Improve Students' Reading Comprehension in English Classes for Young Students?, showed a positive relationship between before and after being given treatment.

The findings of this interpretation indicate that after being given treatment it plays an important role in improving reading comprehension. with a strong relationship between before and after treatment, it can be interpreted that changes before treatment tend to affect changes after treatment is given. Therefore, the use of mind mapping is one strategy that can be used to improve students' reading comprehension skills.

### Conclusion

Researchers want to draw conclusions based on the analysis of each data in the previous table. The results of this study indicate that the average post-test score (68.5) is higher than the average pre-test score (49.5). This means that the mind map method can be considered as an effective method to improve students' reading comprehension. Based on the conclusions above, it is suggested that English teachers can apply the Mind Map method in the teaching and learning process to improve students' reading comprehension. Make students more interested in learning English, especially content that describes people and things. This research is useful, because many Indonesian students face almost the same problems, and can be used by other researchers as a source of information for conducting research in other school environments.

### Refrencess

- [1] P. Davies, "WHAT IS EVIDENCE-BASED EDUCATION?," *Society Educ. Study*, 2012, doi: <https://doi.org/10.1111/1467-8527.00106>.
- [2] D. Adams, "Defining educational quality," *Improv. Educ. Qual. Proj. Publ.*, no. 703, pp. 1–24, 1993, [Online]. Available: [http://pdf.usaid.gov/pdf\\_docs/PNACA245.pdf](http://pdf.usaid.gov/pdf_docs/PNACA245.pdf)
- [3] G. Biesta, "Good education in an age of measurement: On the need to reconnect with the question of purpose in education," *Educ. Assessment, Eval. Account.*, vol. 21, no. 1, pp. 33–46, 2009, doi: 10.1007/s11092-008-9064-9.
- [4] C. Park, "Engaging students in the learning process: The learning journal," *J. Geogr. High. Educ.*, vol. 27, no. 2, pp. 183–199, 2003, doi: 10.1080/03098260305675.
- [5] J. Bamford and R. R. Day, "Teaching Reading," *Annu. Rev. Appl. Linguist.*, vol. 18, pp. 124–141, 1998, doi: 10.1017/s0267190500003512.



- [6] I. Van Wijnendaele, "Reading in a second language," *Psychol. Belg.*, vol. 38, no. 3–4, pp. 149–161, 1998, doi: 10.5334/pb.931.
- [7] H. Küçükoğlu, "Improving Reading Skills Through Effective Reading Strategies," *Procedia - Soc. Behav. Sci.*, vol. 70, pp. 709–714, 2013, doi: 10.1016/j.sbspro.2013.01.113.
- [8] T. Linderholm, "Reading with Purpose Review of the Literature: Reading for Specific Purposes," *J. Coll. Read. Learn.*, vol. 36, no. 2, pp. 70–80, 2006, doi: <https://doi.org/10.1080/10790195.2006.10850189>.
- [9] E. Harianto, "Keterampilan Membaca dalam Pembelajaran Bahasa," *J. Didakt.*, vol. 9, no. 1, pp. 1–8, 2020, [Online]. Available: <https://jurnaldidaktika.org/>
- [10] A. Pourhosein Gilakjani and N. B. Sabouri, "How Can Students Improve Their Reading Comprehension Skill?," *J. Stud. Educ.*, vol. 6, no. 2, p. 229, 2016, doi: 10.5296/jse.v6i2.9201.
- [11] N. K. Duke and P. D. Pearson, "Effective Practices for Developing Reading Comprehension. What Research Has to Say about Reading Instruction," *Eff. Pract. Dev. Read. Compr.*, pp. 205–242, 2004, doi: <https://doi.org/10.1177/0022057409189001-208>.
- [12] N. D. Uysal and F. Yavuz, "Teaching English to Very Young Learners," *Procedia - Soc. Behav. Sci.*, vol. 197, no. February, pp. 19–22, 2015, doi: 10.1016/j.sbspro.2015.07.042.
- [13] A. Sani, D. Rochintaniawati, and N. Winarno, "Enhancing students' motivation through brain-based learning," *J. Phys. Conf. Ser.*, vol. 1157, no. 2, 2019, doi: 10.1088/1742-6596/1157/2/022059.
- [14] T. Buzan, "Buku Pintar Mindmap," pp. 1–23, 2007, [Online]. Available: <https://books.google.com/books?hl=id&lr=&id=ZjllsH9UEiYC&oi=fnd&pg=PA2&dq=T.+Buzan,+"Buku+Pintar+Mindmap&ots=KSirXubXo-&sig=jypsgYIZDtJrDnwfcFWJFfcHRMU>
- [15] A. P. Rahayu, "Penggunaan Mind Mapping dari perspektif Tony Buzan dalam Proses Pembelajaran," *J. Paradig.*, vol. 11, no. April 2021, pp. 65–80, 2021, [Online]. Available: <https://www.ptonline.com/articles/how-to-get-better-mfi-results>
- [16] William Grabe, "3. Research on Teaching Reading," *Annu. Rev. Appl. Linguist.*, vol. 24, pp. 44–69, 2004, doi: 10.1017/s0267190504000030.
- [17] F. B. Davis, "Fundamental factors of comprehension in reading," *Psychometrika*, vol. 9, no. 3, pp. 185–197, 1944, doi: 10.1007/BF02288722.
- [18] Y. Astutik, F. Megawati, and C. N. Aulina, "Total physical response (TPR): How is it used to Teach EFL Young Learners?," *Int. J. Learn. Teach. Educ. Res.*, vol. 18, no. 1, pp. 92–103, 2019, doi: 10.26803/ijlter.18.1.7.
- [19] M. Crowe and L. Sheppard, "Mind mapping research methods," *Qual. Quant.*, vol. 46, no. 5, pp. 1493–1504, 2012, doi: 10.1007/s11135-011-9463-8.
- [20] A. Acesta, "Pengaruh Penerapan Metode Mind Mapping Terhadap Kemampuan Berpikir Kreatif Siswa," *Nat. J. Kaji. Penelit. Pendidik. dan Pembelajaran*, vol. 4, no. 2b, pp. 581–586, 2020, doi: 10.35568/naturalistic.v4i2b.766.
- [21] Leal Filho and M. Kovaleva, "Research Methods," *Environ. Sci. Eng.*, vol. 5, no. 3, pp. 81–82, 2015, doi: 10.1007/978-3-319-10906-0\_5.
- [22] I. Etikan, "Comparison of Convenience Sampling and Purposive Sampling," *Am. J. Theor. Appl. Stat.*, vol. 5, no. 1, p. 1, 2016, doi: 10.11648/j.ajtas.20160501.11.
- [23] S. Syamsuryadin and C. F. S. Wahyuniati, "Tingkat Pengetahuan Pelatih Bola Voli Tentang Program Latihan Mental Di Kabupaten Sleman Yogyakarta," *Jorpres (Jurnal Olahraga Prestasi)*, vol. 13, no. 1, pp. 53–59, 2017, doi: 10.21831/jorpres.v13i1.12884.
- [24] B. D. Jones, C. Ruff, J. Snyder, B. Petrich, and C. Koonce, "The Effects of Mind Mapping Activities on Students' Motivation," *Int. J. Scholarsh. Teach. Learn.*, vol. 6, no. 1, 2012, doi: 10.20429/ijstol.2012.060105.



## ORIGINALITY REPORT

---

14%

SIMILARITY INDEX

12%

INTERNET SOURCES

10%

PUBLICATIONS

8%

STUDENT PAPERS

---

## PRIMARY SOURCES

---

1	Submitted to Universitas Negeri Manado Student Paper	2%
2	e-repository.perpus.iainsalatiga.ac.id Internet Source	1%
3	eprints.walisongo.ac.id Internet Source	1%
4	ojs.umada.ac.id Internet Source	1%
5	jurnal.unikal.ac.id Internet Source	1%
6	Submitted to Queen Mary and Westfield College Student Paper	1%
7	seaninstitute.org Internet Source	1%
8	repository.lppm.unila.ac.id Internet Source	1%
9	journal.iain-manado.ac.id Internet Source	1%

---

10	<a href="https://pdfs.semanticscholar.org">pdfs.semanticscholar.org</a> Internet Source	1 %
11	Submitted to University of Strathclyde Student Paper	1 %
12	<a href="https://digilib.unila.ac.id">digilib.unila.ac.id</a> Internet Source	1 %
13	<a href="https://media.neliti.com">media.neliti.com</a> Internet Source	1 %
14	<a href="https://www.atlantis-press.com">www.atlantis-press.com</a> Internet Source	1 %
15	Submitted to Regent Business School Student Paper	1 %
16	Submitted to capitoluniversity Student Paper	1 %
17	<a href="https://elibrary.nusamandiri.ac.id">elibrary.nusamandiri.ac.id</a> Internet Source	1 %
18	<a href="https://www.scilit.net">www.scilit.net</a> Internet Source	1 %
19	Mhd Ramadhan. "The Effectiveness Of Use Of E-Learning In Entrepreneurship Courses In Private Vocational School, Pematangsiantar City Preparation", RIGGS: Journal of Artificial Intelligence and Digital Business, 2023 Publication	1 %

---

Exclude quotes      On

Exclude matches      < 1%

Exclude bibliography      On