

The Effect of the Guided Inquiry Learning Model on the Critical Thinking Skills of Junior High School Students Class VIII about Vibration, Waves, and Sound

Hidayah¹, Arif Sholahuddin², Maya Istyadji³

^{1,3}Science Education FKIP ULM

Jl. Brigadier General. H. Hasan Basri, Banjarmasin City, Indonesia, 70124

²Postgraduate FKIP ULM

Jl. Brigadier General. H. Hasan Basri, Banjarmasin City, Indonesia, 70124

*Email: hidayahmar96@gmail.com

ABSTRACT

Research has been carried out on the effect of the guided inquiry learning model on the critical thinking skills of VIII grade junior high school students on the subject of vibrations, waves, and sounds at SMP Negeri 27 Banjarmasin. This study aims to describe the effect of the guided inquiry learning model on the critical thinking skills of eighth-grade junior high school students on the subject of vibration, waves, and sound. The type of research used in this research is the pre-experimental method with the experimental design of The One Group Pretest Posttest. The research subjects in this study were conducted using random sampling. The research subjects in this study were class VIII E as many as 33 people in the experimental class. The data collection technique used the test technique. The data analysis technique uses the t-test to analyze the effect of the guided inquiry learning model on students' critical thinking skills. From the results of the t-test, the value of students' critical thinking skills was obtained with $\text{sig} (0.000) < \alpha = 0.05$, meaning that there was a difference between the pretest and posttest results of students' critical thinking skills using the guided inquiry learning model. The research results show that the guided inquiry learning model influences students' critical thinking skills so this learning model can be used as an alternative learning model in schools to improve student's critical thinking skills.

Keywords: guided inquiry, critical thinking skills

ABSTRAK

Telah dilakukan penelitian tentang pengaruh model pembelajaran inkuiri terbimbing terhadap keterampilan berpikir kritis siswa SMP kelas VIII pokok bahasan getaran, gelombang, dan bunyi di SMP Negeri 27 Banjarmasin. Penelitian ini bertujuan untuk menggambarkan pengaruh model pembelajaran inkuiri terbimbing terhadap keterampilan berpikir kritis siswa Sekolah Menengah Pertama kelas VIII dalam pokok bahasan getaran, gelombang, & bunyi. Jenis penelitian yg dipakai pada penelitian ini merupakan metode *pre-experimental* menggunakan

desain eksperimen *The One Group Pretest Posttest*. Subyek penelitian pada penelitian ini dilakukan dengan cara *random sampling*. Subyek penelitian dalam penelitian ini adalah kelas VIII E sebanyak 33 orang sebagai kelas eksperimen. Teknik pengumpulan data memakai teknik tes. Teknik analisis data memakai uji-t untuk menganalisis efek model pembelajaran inkuiri terbimbing terhadap keterampilan berpikir kritis siswa. Hasil uji t, diperoleh nilai keterampilan berpikir kritis siswa dengan $\text{sig } (0,000) < \alpha = 0,05$, artinya ada perbedaan antara hasil *pretest* dan *posttest* keterampilan berpikir kritis siswa dengan menggunakan model pembelajaran inkuiri terbimbing. Hasil penelitian memperlihatkan bahwa model pembelajaran inkuiri terbimbing berpengaruh terhadap keterampilan berpikir kritis siswa sehingga model pembelajaran ini dapat dijadikan alternatif model pembelajaran di sekolah untuk meningkatkan keterampilan berpikir kritis siswa.

Kata Kunci: inkuiri terbimbing, keterampilan berpikir kritis.

BACKGROUND

Law Number 20 of 2003 concerning the National Education System states that "National education essentially functions to develop the ability and shape the character and civilization of a dignified nation to educate the nation's life, aims to develop the potential of students to become human beings who believe and fear God Almighty, have a noble character, healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens answer". One of the requirements for the development of HR (Human Resources) is education. Therefore, educational renewal is something that should be done continuously at all levels in anticipation of the culture of future life. One of the formal education is school. A school is an institution designed to facilitate the learning process of students under the supervision of teachers.

According to the cognitive school in Sanjaya (2006) in essence, learning is a thinking and mental process that optimally utilizes the potential of each person or individual. Parwati (2020) explained that education that can prepare students to be able to face technological advances is education with student-centered learning. Student-centered learning aims to build its cognitive structure through data, theories, or facts observed by students, especially in science learning. Learning is not just a process of gaining knowledge and memorization, but how students' thinking skills in interpreting knowledge. One such thinking skill is critical thinking skills. Seranica, Purwoko, and Hakim (2018) stated that one of the high-level thinking that students must have is the critical thinking process because critical thinking can train students to analyze problems and solve problems in the field of science. According to Ramadhanti and Agustini (2021), critical thinking skills are not found in humans from birth, but can be trained, one of which is through learning.

Based on the results of Handriani's research (2015) show that *teacher-centered* (teacher-centered) is still often used in the learning process in schools. In teacher-centered learning, the knowledge obtained by students comes from the teacher so students become passive because they only listen to explanations from the teacher. This kind of learning process does not make students develop in finding their knowledge so higher-order thinking skills, one of which is

critical thinking skills, are never trained. Good learning is learning done by students. Students play an active role in searching, finding, and proving so that they do not only receive information from the teacher.

The results of observations that have been made by researchers at SMPN 27 Banjarmasin, especially class VIII E, show that teachers still play a dominant role as informants in the learning process in the classroom. The level of students' questioning ability is still quite low, students still rarely ask questions when the teacher allows them to ask. This is under the observations of Safitri, Jamal, and Salam (2015) which show that the learning process (teaching and learning) carried out at SMPN 27 Banjarmasin is still teacher-centered, the method used in the learning process (teaching and learning) is a lecture. The reason for the allocation of time for science subjects that are lacking makes practicum never done so that learning only focuses on cognitive aspects. This kind of learning process makes students not get the opportunity to explore their abilities and makes students only try to memorize facts and can only do the same questions with example questions so students' critical thinking skills do not develop optimally. Based on Mayasari's research (2018) the reality faced at SMP Negeri 27 Banjarmasin, students tend to only memorize concepts that already exist in the manuals they use without understanding the meaning of the reading in the book because most students are accustomed to the teacher-centered learning process, so students tend to be passive during the learning process

Based on the results of research by Fitriyani, Corebima, and Ibrahim (2015) show that the guided inquiry learning model applied in improving students' critical thinking skills has a significant effect and the application of the inquiry learning model contributes positively to improving critical thinking. The essence of science has three components, namely process, product, and scientific attitude. So science or science is a learning activity that uses the mind and secrets of natural phenomena that are studied. Science or science learning is not just memorizing and learning knowledge. Therefore, in providing science learning, the approach that should be taken is in the form of hands-on activity and *mind-on activity*, which combines the experience of the science process and understanding of science products. According to Septiari, Suardana, and Selamat (2018) Learning with a direct learning model makes students unable to develop their abilities and tend to depend on the information provided by the teacher. This can be seen during learning activities, students only listen to the material explained by the teacher and then conduct experiments according to the instructions given by the teacher. As a result, students feel bored and less active in 53 learnings which will affect the low understanding of student concepts.

The inquiry learning model optimizes all the potentials of students in the activities of finding problems, organizing, and solving problems critically, systematically, analytically, and logically in a relatively short time to optimize higher-order thinking skills, namely students' critical thinking skills. Inquiry learning strategy is a process of learning activities that focus on the process of thinking analytically and critically to find and find one's questionable answers to a problem. The use of inquiry learning tactics aims to increase intelligence logically, systematically, and critically, or raise intellectuals to be part of mental processes (Sanjaya, 2006). The results of Anggareni's (2013) research show that compared to direct learning strategies, students' critical intelligence and understanding of concepts through inquiry learning tactics are superior. Based on the background mentioned, this study will apply a guided inquiry

learning model on the subject of vibrations, waves, and sounds in junior high school to describe its effect on students' critical thinking skills.

Based on the results of Ramadhanti and Agustini's research (2021), the guided inquiry model has a positive influence on improving the critical thinking skills trained. This can happen because, in phase 3 of the guided inquiry model, there are activities to collect data to test a hypothesis by conducting experiments directly, and in phase 4 students analyze and conclude experimental results that can hone their critical thinking skills. According to Bano (2021), learning uses an inquiry model, so that students can exchange ideas, express opinions, and can solve problems well. In the learning process with the inquiry learning model in the classroom, students become enthusiastic because they not only learn theory and become listeners but students also become active in learning. If the student is active in the learning process then the student can understand the material described.

RESEARCH METHODS

The type of research used in this study is a *pre-experimental* method that aims to describe the use of a guided inquiry learning model on the critical thinking skills of grade VIII Junior High School students in the subject of vibration, waves, and sound. The experimental design used is The *One Group Pretest Posttest* as follows:

O ₁	X	O ₂
----------------	---	----------------

The stages used in detail are explained as follows:

O1: Pretest, before learning, 1 selected sample class is given a test.

X: The learning process, in the experimental class using a guided inquiry learning model.

O2: Posttest, after learning, is complete, a critical thinking skills test is performed.

In this study, the independent variable used was a guided inquiry learning model, while the variable tied to this study was students' critical thinking skills. The research was conducted in the second semester (one) of the 2017/2018 academic year. Researchers used research time for 2 months, from April to June. The number of meetings is 4 times. This research was conducted at State Junior High School 27 Banjarmasin.

The determination of research subjects in this study was carried out using random sampling. The research subjects in this study were one class at SMP Negeri 27 Banjarmasin, namely 33 grade VIII E students as an experimental class using a guided inquiry learning model.

The instruments used in the study were 5 description tests. The description test is used to determine students' critical reason and the extent to which students experience critical thinking progress using a guided inquiry learning model.

Before the test instrument is used for research, the instrument must be validated first. In this validation measurement, a measurement of the validity of the content is carried out. A test instrument is said to have content validity if it includes two aspects, namely valid content and valid sampling technique. Valid content relates to whether the test instrument can measure the goals to be achieved. Valid sampling techniques are related to how a test instrument represents the content of the lesson. (Sukardi, 2003)

The validity of the contents for the test question instrument is determined from the evaluation and consideration of the assessment team, namely 2 lecturers of Science Education FKIP ULM

Banjarmasin and one lecturer of Physics Education FKIP ULM Banjarmasin. Whether or not the instrument is valid is influenced by the match results of validator validation results using predetermined validity criteria. The validity value is given using a percentage calculation formula, as follows:

$$\text{Persentase validitas} = \frac{\text{skor perolehan}}{\text{skor ideal}} \times 100\% \quad (1)$$

(Hamdi, *et al*, 2013)

Whether or not the instrument is valid is influenced according to suitability according to the validation results using criteria that have been influenced. The criteria for the validity of teaching materials can be seen in Table 1.

Table 1. Instrument validity criteria

No	Validity percentage interval	Validity criteria
1	85,01% - 100,00%	Valid without revision
2	70,01% - 85,00%	Valid with minor revisions
3	50,01% - 70,00%	Valid with major revisions
4	01,00% - 50,00%	Invalid

(Akbar, 2013)

In research, before the test instrument is used, it must first be tested to determine the level of reliability of the instrument. Reliability equals consistency or mockery. A research instrument can be said to have a high level or value of reliability if the test formed has consistent results in measuring what is to be measured. So in this case it means that the more reliable an instrument test has requirements, the more confident we can reveal that the results of a test have the same results when the test is retested. (Sukardi, 2003).

Cronbach's alpha is used to measure tests in the form of descriptions. (Sukardi, 2003). Cronbach's Alpha formula is as follows:

$$r_{11} = \left(\frac{n}{n-1} \right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right)$$

Information:

R11 = Instrument Reliability

n = Number of items (items)

$\sum \sigma_i^2$ = Number of score variances for each item

σ_t^2 = Total score variance

The criteria for instrument reliability according to Ratumanan & Laurens (2003) are seen in Table 2 below.

Table 2 Instrument Reliability Criteria

No	Reliability Coefficient	Interpretation
1	$0.80 \leq r$	High degree of reliability
2	$0.40 \leq r < 0.80$	Medium degree of reliability
3	$R < 0.40$	Low degree of reliability

(Ratumanan & Laurens, 2003)

Based on the calculation results, the test instrument used in this study has a critical thinking skills test reliability coefficient of 0.65, so it can be interpreted that the reliability of the critical

thinking skills test instrument is in the medium category so that the critical thinking skills test instrument can be declared suitable for use in research.

This research procedure consists of 3 terms, namely preparation term, application term & final term. The following is the mechanism of research carried out:

1. Research Preparation Phase

The preparatory stage or initial steps carried out before the study takes place are as follows:

- a. determine the school where the research and population are taken.
- b. Drafting proposals.
- c. conduct proposal seminars.
- d. Develop learning tools including a learning implementation plan (RPP)
- e. Compile research instruments, namely: critical thinking skills test instruments
- f. validate test instruments.

2. Research Implementation Stage

The research implementation stage is a stage used by researchers to collect data on the variables to be studied, the stages are as follows:

- a. Pretest, before conducting research, an initial test or assessment of students' critical thinking skills is carried out.
- b. The learning process, learning in experimental classes is carried out using learning with a simple experiment-based guided inquiry model while in control classes it is carried out using conventional learning.
- c. Posttest, after the research is completed, a learning outcome test is carried out to determine students' critical thinking skills.

3. Final Stage of Research

- a. Provide assessment on tests of Shiva's critical thinking skills obtained from the pretest and posttest.
- b. carry out testing and processing of data that has been obtained.
- c. Provide conclusions on the results of the interpretation of research data.

Data collection techniques in this study used tests and documentation. The tests conducted in this study were tests of critical thinking skills, namely pretest and posttest. A pretest or initial assessment is an evaluation activity carried out before the subject matter is delivered to know students' initial knowledge. The posttest or final assessment is an evaluation activity carried out after learning ends, which aims to determine the level of students' critical thinking skills. The document taken in this study is the answer data of students' critical thinking skills test.

Data analysis aims to put meaning to data that has been collected based on research samples (grade VIII E students), including data on critical thinking skills test results in vibration, wave, and sound materials. To draw data conclusions in this study, the data was analyzed inferentially.

1. Inferential Analysis

- a. The normality test aims to know the distribution of data between the highest grades of students using the lowest grades of students. The normality test of this research data was used by the Shapiro-Wilk *normality test* using statistical hypotheses as follows:

H_0 = Normal distributed population

H_a = Abnormally distributed population

- b. T-test, performed with *SPSS program version 17 for Windows*. H_a accepted and H_0 rejected, if equal to or greater than the significant level of 5% then the effect of the independent variable on the dependent variable is significant. Conversely, H_0 is accepted and H_a is rejected if it is smaller, then the effect of the guided inquiry learning model variable on the critical thinking skill variable is not significant.

RESULT AND DISCUSSION

Based on the calculation results, the test instrument used in this study has a critical thinking skills test reliability coefficient of 0.65, so it can be interpreted that the reliability of the critical thinking skills test instrument is in the medium category so that the critical thinking skills test instrument can be declared suitable for use in research.

The results of student work in guided inquiry learning are presented in the following table.

Table 3. Average LKPD results

No	Observed aspects	Average	Category
1	Formulate a problem	85	Good
2	Creating hypotheses	85	Good
3	Collecting data	90	Good
4	Perform analysis	90	Good
5	Making conclusions	90	Good

*Category : 80-100 = good; 60-79 = sufficient; < 60 = less

Based on the table, it can be seen that the average work of the overall students, namely formulating problems, is 85 which is in the good category. The average score of students in making hypotheses is 85 which is in the good category. The average score of students in collecting observation data is 90 which is in the good category. The average score of students in making data analysis is 90 which is in the good category. The average score of students in making conclusions is 90 including the good category. The overall average number of students' work is 88 in the good category.

1. Critical Thinking Skills

Based on the results of research on critical thinking skills of students of State Junior High School 27 Banjarmasin grade VIII E science subjects in the subject of vibration, waves, and sound using a guided inquiry learning model, data have been obtained from learning activities. Critical thinking skills in this study were assessed through critical thinking skills tests in the form of *pretest* and *posttest*.

Table 4. Average Summary of Critical Thinking Test Results

	Treatment Class	
	Pretest	Posttest
Average	17,48	72,78

Table 4 shows the differences between pretests and posttest in experimental classes. Furthermore, the data on the results of the critical thinking skills test were carried out normality test and t-test as follows.

The normality test aims to determine data from the results of critical thinking skills tests that are normally distributed or not normally distributed using the *Kolmogorov-Smirnov test*. The results of normality testing against critical thinking skills test results can be seen in Figure 1.

	Nilai Postes	Kolmogorov-Smirnov ^d			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Nilai Pretes	4.09	.290	6	.125	.820	6	.088
	4.25	.260	2	.			
	4.38	.229	12	.083	.886	12	.104
	4.44	.278	5	.200*	.911	5	.474

Figure 1. Normality Test Results of students' critical thinking skills test data

Based on Figure 1, the results of the normality test data of students' critical thinking skills test show that the significant levels of both *the Kolmogorov-Smirnov* and *Shapiro Wilk* tests have all been above 0.05, so from these results, it can be concluded that the data has been distributed normally.

	Nilai Postes	Kolmogorov-Smirnov ^d			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Nilai Pretes	4.09	.290	6	.125	.820	6	.088
	4.25	.260	2	.			
	4.38	.229	12	.083	.886	12	.104
	4.44	.278	5	.200*	.911	5	.474

Figure 2. Paired Samples Test

Based on the results of the t-test, the value of students' critical thinking skills results with $\text{sig} (0.000) < \alpha = 0.05$, it can be said that there is a difference between the results of the pretest and posttest students' critical thinking skills using guided inquiry learning.

The results of the study on the application of the guided inquiry learning model on the subject of vibration, waves, and sound to the results of students' critical thinking skills stated that the guided inquiry learning model had a significant effect on students' critical thinking skills. The correlation between the value of pretest and posttest is 0.876 with a probability value of 0.000. It states that the relationship between pretest and posttest values is significantly related because the probability value < 0.05 and the relationship is 67.6%. This shows that the influence of guided inquiry learning on students' critical thinking skills is 67.6%. The results obtained in this study cannot reach a percentage of 100% because there are still other factors that cannot be controlled that affect students' critical thinking skills. Other factors that are intended include different backgrounds of students, students are not used to answering questions using critical thinking indicators and also students are not used to using the learning process in guided inquiry examples. So far, because the learning process given by the teacher is still in the form of lectures and recording lessons on the blackboard, students still have difficulty adjusting to using the inquiry model. This is one of the weaknesses of the inquiry model according to Putra (2013), namely teachers and students find it difficult to apply this method because they are still familiar with the lecture and question-and-answer methods.

Researchers act as facilitators and mentors during the learning process, while students themselves look for learning concepts and build their knowledge through a series of

experimental activities carried out by students. It is also a factor that affects students' critical thinking skills. Another factor that also affects students' critical thinking skills is the physical and psychological factors of students. According to Slameto (2010), factors that affect learning outcomes can be divided into 2 groups, namely internal and external factors. Internal factors are factors found in individuals who are learning, while external factors are factors that exist outside the individual. The classroom atmosphere is also influential in learning activities. In the learning process that takes place, the class is hot because it is in the afternoon class hour, as a result, the concentration of students decreases which results in students no longer focusing while studying. Based on the results of research by Suarmawan, Meitriana, and Haris (2019), the condition of school buildings and learning support tools are external factors that affect student learning outcomes.

The results of this study are supported by the results of previous research by Arwan, Tawil, and Ramlawati (2021) entitled "The Effect of the Guided Inquiry Learning Model on the Critical Thinking Ability of Class VII Junior High School Students". The results of the study stated that the guided inquiry learning model affects students' critical thinking skills, using the guided inquiry model makes students work in teams and all students must master the lesson so that students are required to be active. If students master the lesson, then critical thinking skills will also increase.

CONCLUSION

Based on data analysis and discussion of the results of the research conducted, it can be concluded that examples of guided inquiry learning have a significant effect on student's critical thinking skills in science subjects at State Junior High School 27 Banjarmasin. The results of the t-test, obtained the value of students' critical thinking skills with $\text{sig} (0.000) < \alpha = 0.05$, meaning that there is a difference between the results of the pretest and posttest students' critical thinking skills using the guided inquiry learning model. The results showed that the guided inquiry learning model affects students' critical thinking skills so this learning model can be used as an alternative learning model in schools to improve student's critical thinking skills.

REFERENCES

- Akbar, S. (2013). *Instrumen Perangkat Pembelajaran*. Bandung: PT. Remaja Rosdakarya
- Anggareni, W. N., Ristiati, P. N., & Widiyanti, M. P. (2013). Implementasi strategi pembelajaran inkuiri terhadap kemampuan berpikir kritis dan pemahaman konsep IPA siswa SMP. *e-Journal Program Pascasarjana Universitas Pendidikan Ganesha*, 3 (1), 1-11.
- Arwan, A., Tawil, M., & Ramlawati. (2021). Pengaruh Model Pembelajaran Inkuiri Terbimbing Terhadap Keterampilan Berpikir Kritis Peserta Didik Kelas VII Sekolah Menengah Pertama. *Jurnal IPA Terpadu*, 5(1), 19-27.
- Bano, A. (2021). Pengaruh Model Pembelajaran Inquiry Terhadap Hasil Belajar Siswa di SMP Katolik Maarsudiwi Malang. *Jurnal Pemikiran Pendidikan dan Pembelajaran*, 1 (2), 61-66
- Fitriyani, R., Corebima, D. A., & Ibrohim. (2015). Pengaruh strategi pembelajaran problem based learning dan inkuiri terbimbing terhadap keterampilan metakognitif, berpikir kritis, dan hasil belajar kognitif siswa SMA. *Jurnal Pendidikan Sains*, 3 (4), 186-200.

- Handriani, S. L., Harjono, A., & Doyan, A. (2015). Pengaruh model pembelajaran inkuiri terstruktur dengan pendekatan saintifik terhadap kemampuan berpikir kritis dan hasil belajar fisika siswa. *Jurnal Pendidikan Fisika dan Teknologi*, 1 (3), 210-220.
- Mayasari, R. (2018). Gambaran Umum Aktivitas Belajar Siswa SMP Negeri 27 Banjarmasin dengan Menggunakan Model Pembelajaran Berdasarkan Masalah (PBM). *Jurnal Pendidikan Hayati*, 4 (2), 61-65.
- Parwati, G. A. P. U., Rapi, N. K., & Rachmawati, D. O. (2020). Penerapan Model Pembelajaran Inkuiri Terbimbing untuk Meningkatkan Kemampuan Berpikir Kritis dan Sikap Ilmiah Siswa SMA. *Jurnal Pendidikan Fisika undiksha*, 10 (1), 49-60.
- Putra, S. R. 2013. *Desain Belajar Mengajar Kreatif Berbasis Sains*. Yogyakarta : Diva Press (Anggota IKAPI).
- Ramadhanti, A. & Agustini, R. (2021). Analisis Keterampilan Berpikir Kritis Peserta Didik Melalui Model Inkuiri Terbimbing pada Materi Laju Reaksi. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran, dan Pembelajaran*, 7 (2), 385-394.
- Ratumanan, T.G. 2003. Pengaruh Model Pembelajaran dan Gaya Kognitif Terhadap Hasil Belajar Matematika Siswa SLTP di Kota Ambon. *Jurnal Pendidikan Dasar*, 5 (1), 1-10
- Safitri, R., Jamal, M. A., & Salam, A. (2015). Pengembangan perangkat pembelajaran IPA SMP berorientasi keterampilan berpikir kritis pada pokok bahasan getaran dan gelombang dengan model pembelajaran inkuiri terbimbing. *Jurnal berkala ilmiah pendidikan fisika*, 3 (3), 170-175.
- Sanjaya, W. (2006). *Strategi pembelajaran berorientasi standar proses pendidikan*. Jakarta: Kencana.
- Septiari, N. K. D., Suardana, I. N, & Selamat, K. (2018). Efektivitas Model Pembelajaran Inkuiri Terbimbing dalam Meningkatkan Pemahaman Konsep IPA Siswa SMP. *Jurnal Pendidikan dan Pembelajaran Sains Indonesia*, 1 (1), 45-56
- Seranica, C., Purwoko, A. A., & Hakim, A. (2018). Influence of guided inquiry learning model to critical thinking skill. *IOSR Journal of Research & Method in Education*, 12(4), 407-422
- Slameto. (2010). *Belajar dan Faktor-faktor yang Mempengaruhi*. Jakarta: Rineka Cipta.
- Suarmawan, K. A., Meitriana, M. A., & Haris, I. A. (2019). Faktor-Faktor Eksternal yang Mempengaruhi Hasil Belajar Ilmu Pengetahuan Sosial Siswa Kelas VIII di SMP Negeri 3 Singaraja Tahun Ajaran 2018/2019. *Jurnal Pendidikan Ekonomi*, 11 (2), 528-539.
- Sukardi. 2003. *Metodologi Penelitian Pendidikan Kompetensi dan Prakteknya*. Jakarta : Bumi Aksara.