



# **JURNAL ILMIAH GLOBAL EDUCATION**

ejournal.nusantaraglobal.ac.id/index.php/jige

# THE EFFECTIVENESS OF USING LEARNING JOURNALS ASSESSED FROM LEARNING OUTCOMES AND METACOGNITIVE ABILITY IN PAI LEARNING

Syafruddin<sup>1</sup>, Hamdanah<sup>2</sup>, Ahdar<sup>3</sup>, Zulfah<sup>4</sup>, Muzakkir<sup>5</sup>

<sup>1,2,3,4,5</sup>Pendidikan Agama Islam IAIN Parepare, Sulawesi Selatan, Indonesia

# **History Article**

## Article history:

Received July 10, 2023 Approved August 23, 2023

# Keywords:

Learning Journal, Metacognition, Effectiveness

## **ABSTRACT**

This study aims to determine the effectiveness of using study journals assessed from students' abilities and students' metacognition abilities in solving Al-Qur'an Hadith problems at SMKN 1 Barru. The method in this study is an experiment involving learning using a study journal. The sample in this study were all 12 students of class XI. The sampling technique in this study is saturated sampling. The use of learning journals is less effective in terms of students' abilities in solving problems with the Qur'an Hadith system, this can be shown by the percentage of students who complete, namely only 50% of the number of students obtaining learning outcomes 70, while the use of effective learning journals is assessed from the ability students' metacognition in solving two-variable linear equation system problems, this can be shown by 100% of students obtaining an average percentage of metacognition ability 66.67%.

© 2023 Jurnal Ilmiah Global Education

\*Corresponding author email: syafruddinbarru1@gmail.com

#### INTRODUCTION

Learning journal as a term that is translated from learning journal is a document that is continuously growing and developing. Journal Study is receptacle Which loadreflection results in field learning intended for students. Teachers can read it as input material to see the ability of students in the field they are studying. Students can fill it in the form of reflections or observations related to classroom learning.

Learning journals are not only oriented towards developing academic abilities alone but it is hoped that through the habit of writing down learning experiences, these students are used to expressing their feelings, thoughts or hopes about the learning given by the teacher (Laurens,

2001: 7). According to Kartono (in Fadllia, 2012: 8), learning journals are very useful for someone, namely: (1) giving a real picture of the growth of understanding of a material or one's experience, (2) shows the progress of one's learning, (3) keeps a record of one's thoughts and ideas through one's learning experiences, and (4) helps identify strengths, weaknesses, and choices in one's learning.

According to Sudrajat (2010: 3) the content in learning journals can be: (1) noting interesting things and wanting to be followed up more deeply from a book or article read, (2) noting questions that arise in the mind about the topic material read or studied, (3) notes on the main things that are just known from the material that has been studied, (4) notes on relevant material from other sources that have been read, (5) notes on anything that has been found related to material being studied or read, in the form of one or two sentences and writing down how to find it, (6) notes on reflections on what has been learned, (7) notes on how learning is done in relation to what is learned in different ways,and (8) noting thoughts that have not been fully satisfied and which he wants to improve further, including reflections on feelings he has learned, learning progress, and theories that have developed in his mind.

Research conducted by Kartono and Anggraeni (in Fadllia, 2012: 14) states that learning journals have been proven to improve students' cognitive and affective learning outcomes. Meanwhile, research conducted by Ong Rachel (2004:10) states that learning journals can increase students' metacognitive awareness and make students more disciplined in learning. And based on a research article by Sabilu (2008: 3) entitled "The Influence of Using Learning Journals in Multistrategic Learning on the Cognitive and Metacognitive Abilities of Students of SMA Negeri 9 Malang" it was found that learning journals in multistrategic learning were very effectively used for the learning process of class X students of SMA Negeri 9 Malang in improving cognitive abilities and metacognitive abilities. Therefore, In the process of solving mathematical problems, students certainly understand a problem, plan a solution strategy, make decisions about what to do, and carry out these decisions. In this process students should monitor and re-check what they have done. If the decision taken is not right, then students should try other alternatives or make a judgment. The process of realizing mistakes, monitoring work results and looking for other alternatives are some aspects of metacognition that are necessary in solving mathematical problems (Kusuma, 2020).

Schonfield (in Hudiono, 2007: 1189) states that the criteria for good problem solving include: having the ability to monitor and manage problem solving efforts and tends to obtain reasonable and understandable problem solving. This statement explains that problem solving is not only cognitive activity, but also metacognitive monitoring that regulates each activity.

O'Neil and Brown (in Nurmaningsih, 2009:13) state that metacognition is the process by which a person thinks about thinking in order to build strategies to solve problems. Because it can be said that metacognition is awareness of what is known and what is not known. Meanwhile, metacognition strategies refer to ways to increase awareness about the thinking and learning processes that apply so that when this awareness is realized, one can control his thoughts by designing, monitoring and assessing what he learns (Wulansari, 2021).

So the purpose of this study was to determine the effectiveness of using study journals assessed from students' abilities and students' metacognition abilities in solving Al-Qur'an Hadith problems at SMKN 1 Barru.

A learning journal is a container that contains the results of reflection in the field of learning intended for students. Teachers can read it as input material to see the ability of students in the field they are studying. Students can fill it in the form of reflections or observations related to classroom learning. Learning journals are not a summary of learning material, but focus more on students' reflections on what they have read or are learning (Mursyid, 2010: 2). Learning journals can enable students to become more aware of their own learning, so as to increase metacognitive awareness (Ong Rachel, 2004:10).

According to Jonassen (in Fadllia, 2012: 15) states metacognitive is a person's awareness of how he learns, the ability to assess the difficulty of a problem, the ability to observe the level of self-understanding, the ability to use various information to achieve goals, and the ability to assess the progress of one's own learning. With the existence of metacognitive awareness in students can make students more motivated in participating in learning.

Schonfield (in Hudiono, 2007: 1189) states that the criteria for good problem solving include: having the ability to monitor and organize problem-solving efforts and tend to obtain reasonable and understandable solutions to problems. This statement explains that problem solving is not only cognitive activity, but also metacognitive monitoring that regulates each activity.

From the several opinions above, the hypothesis in this study is that the use of effective learning journals is assessed from students' abilities and students' metacognition abilities in solving problems of the Qur'an Hadith at SMKN 1 Barru.

#### **METHODS**

This research is in the form of an experiment involving learning using student learning journals (Nazir, 2014). This type of research is Pre-Experimental Design. This study used the One-Shot Case Study research design. The population in this study were all students of SMKN 1 Barru with a total of 968 students. The sample in this study was class XI students, totaling 12 students consisting of one class or all members of the population. The sampling technique in this study is saturated sampling. The procedure in this study was as follows: carrying out learning about the material for making mathematical models and solving everyday problems related to a system of two-variable linear equations, giving problem-solving test questions, giving metacognitive ability questionnaires and study journals, conducting interviews, describe the data, and conclude the research results. Data collection tools used in this study were problem solving test questions, metacognition questionnaires, and study journals (Arikunto, 2016).

Data analysis used in this study is descriptive statistics. Research conducted on populations (without sampling) will use descriptive statistics in the analysis (Sugiyono, 2010:208). The effectiveness of learning in this study was assessed from the learning outcomes and students' metacognition abilities. The use of study journals assessed from students' abilities is said to be effective if  $\geq$ 75% of the number of students obtains learning outcomes of  $\geq$ 70. While the use of study journals studied from students' metacognition ability is said to be effective if  $\geq$ 75% of the number of students obtains an average percentage of metacognition ability  $\geq$ 66.67%.

## **RESULTS AND DISCUSSION**

The data collected was in the form of student test scores, student metacognition questionnaires, student study journals, and results of interviews with students. In the following, some data are presented from the aspects studied including: the results of students' abilities in solving test questions on the Qur'an Hadith, the results of students' metacognition abilities based on ability levels (upper, middle and lower), the relationship between students' abilities and students' metacognition abilities, and student learning journal results.

Table 1

Results of Students' Ability in Al-Qur'an Hadith Learning

Student's name	Mark	Criteria	
		complete	Not Completed
A	100	complete	_
В	100	complete	_
С	100	complete	_
D	100	complete	
Е	87.5	complete	_
F	87.5	complete	
G	62.5		Not Completed
Н	62.5		Not Completed
I	37.5		Not Completed
J	37.5		Not Completed
K	37.5		Not Completed
L	37.5		Not Completed
Average	70,83		
Percentage	70.83%	50%	50%

Table 1 shows that 50% of students complete and 50% of students do not complete with an average learning result of 70.83. Of the 50% of students who did not complete, most of them still had problems in converting word problems into practical models. So in terms of students' ability to solve problems, learning using learning journals is not yet effective because only 50% of students score >70.

Table 2

Results of Students' Metacognition Ability Ability Level Ability Ability Student Student's Percentage Category Metacognition Metacognition name 75% Tall A В 66.67% Enough On C 66.67% Enough D 83.33% Tall E 66.67% Enough F 91.67% Tall Intermediate G 83.33% Tall Η 75% Tall 66.67% Ι Enough J 91.67% Tall Lower K 91.67% Tall L 75% Tall

Table 2 shows that 66.67% of students get a high metacognitive ability category and 33.33% of students get a sufficient metacognitive ability category. So in terms of students' metacognitive abilities in problem solving using learning journals it is effective because 100% of students get an average percentage of metacognitive abilities ≥66.67%.

Table 3

The Relationship Between Problem Solving Ability And Students'

Metacognitive Ability

Metacognitive Ability				
	Ability Level	AbilitySolving	Ability	
Student's name	Student	Problem	Category	
			Metacognition	
A	-	100	Tall	
B	On	100	Enough	
C	-	100	Enough	
D		100	Tall	
E	-	87.5	Enough	
F	Intermediate	87.5	Tall	
G		62.5	Tall	
H		62.5	Tall	
I	•	37.5	Enough	
J	Lower	37.5	Tall	
K	-	37.5	Tall	
L		37.5	Tall	

Table 3 shows that not all students with high metacognitive abilities have high problem solving abilities and not all students with low metacognitive abilities have low problem solving abilities as well. Based on the results of interviews conducted with students, information was obtained that when filling out the metacognition questionnaire, students could not condition themselves when working on problem solving test questions. So that the results of the questionnaire are not in accordance with the results of the problem solving test he is doing.

Based on the results of filling in student learning journals, most students are still unfamiliar with learning journals. This is due to the fact that learning journals have never been introduced and applied in schools. So that students are still difficult to write the results of their learning experiences, because they are not used to expressing their thoughts in written form. The study journals that have been made by researchers have drawbacks, namely the questions contained in the study journals have not been able to make students bring up students' metacognition abilities in solving problem-solving questions. Thus, this resulted in students' ability to complete problem solving test questions less effective (Ivkonic, 2011).

## **CONCLUSIONS**

Based on the analysis that has been done, the researcher can conclude that the use of study journals is less effective when assessed from the students' abilities in solving Al-Qur'an Hadith problems. learning  $\geq$ 70), but if examined from students' metacognition abilities in solving problems of the Qur'an Hadith, it can be concluded that learning using learning journals is effective, because 100% of students obtain an average percentage of metacognition abilities  $\geq$ 66.67%.

## REFERENCES

- Arikunto, Suharsimi. Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta, 2016.
- Berestova, T. F. Information resource studies as a new direction of scientific research: Formulation of the problem. Scientific and Technical Information Processing, 42(3), 127–134. https://doi.org/10.3103/S0147688215030028, 2015.
- Fadllia, Ana. 2012. The Effect of Making Learning Journals in the Surrounding Natural Exploration Approach (JAS) on Student Learning Outcomes in Ecosystem Material. Thesis. Semarang: FMIPA UNNES.
- Hudiono, Bambang. 2007. Aspects of Metacognition and Multi*Representation in Systems of Linear Equations*. Bandung: Indonesian Mathematics Doctoral Student Communication Forum, Bandung Institute of Technology, 14 April 2007.
- Hudiono, Bambang. 2007. Get to know the Open-Ended Problem Solving Approach Mathematics Pontianak: STAIN Pontianak Press.
- Ivkonic, A. Towards a new technology for science online. Open access portals and social networking as a source of scientific information. In Open Access to STM Information: Trends, Models and Strategies for Libraries (hal. 75–82). <a href="https://doi.org/10.1515/9783110263749">https://doi.org/10.1515/9783110263749</a>, 2011.
- Kusuma, A. Dukungan perpustakaan dalam proses pembelajaran online di Universitas Islam Negeri Sunan Kalijaga pada masa pandemic Covid-19. LIBRIA, 12(1), 51–70, 2020.
- Laurens, Theresia. 2011. Development of Metacognition in Mathematics Learning. (On line), (<a href="http://p4mriunpat.com/2011/11/14/metakognisi-">http://p4mriunpat.com/2011/11/14/metakognisi-</a> in-learning-mathematics/, accessed 17 March 2013)
- Mursyid. 2010. Learning Journal as One of the Efforts to Improve Learning Outcomes. (On line), (<a href="http://mmursyidpw.com/2010/09/21/jurnal-belajar-learning-journal-as-one-effort-to-improve-study-results-student/">http://mmursyidpw.com/2010/09/21/jurnal-belajar-learning-journal-as-one-effort-to-improve-study-results-student/</a>, accessed 20 May 2013)
- Nazir, M. Metode penelitian. Ghalia Indonesia, 2014.
- Nurmaningsih. 2009. Metacognitive Behavior in Class X High School Students Based on the Level of Ability in Solving Number Pattern Problems. Thesis. Pontianak: FKIP UNTAN.
- Ong, Rachel. 2004. The role of reflection in student learning: study of its effectiveness in complementing problem-based learning environments. (On line), (<a href="http://www.myrp.sg/ced/research/papers/role">http://www.myrp.sg/ced/research/papers/role</a> of reflection in student lear ning. pdf.accessed 11 February 2014)
- Sabilu, Murni. 2008. The Influence of Using Learning Journals in Multistrategic Learning on the Cognitive and Metacognitive Abilities of SMA Negri 9 Malang Students. (On line), (<a href="http://karya-scientific.um.ac.id/index.php/dissertation/article/view/904">http://karya-scientific.um.ac.id/index.php/dissertation/article/view/904</a>, accessed 20 May 2013)
- Sudrajat, Akhmad. 2010. Learning Journal. (On-line), (http://akhmadsudrajat.com/2010/01/04/jurnal-pembelajar-learning-journaling/, accessed 6 February 2014)

- Sugiyono. Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D). Bandung: Alfabeta, 2010.
- Wulansari, A., Albab, M. U., Priatna, Y., & Subhan, A. Inovasi layanan perpustakaan di era pandemi Covid-19: Best practice Perpustakaan Universitas Muhammadiyah Ponorogo. Publication Library and Information Science, 4(2), 44–60. <a href="https://doi.org/10.24269/PLS.V4I2.3610">https://doi.org/10.24269/PLS.V4I2.3610</a>, 2021.