

IMPLEMENTATION OF METACOGNITION-BASED LEARNING STRATEGIES IN PANCASILA LEARNING AT ISLAMIC ELEMENTARY SCHOOL

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Abstract

This study aims to determine the implementation of metacognition-based learning strategies in improving the understanding of Pancasila values material in Class VI MIN 1 Majene students. This study uses a mixed methods approach, combining qualitative and quantitative research to explore the implementation of metacognition-based learning strategies in improving students' understanding of Pancasila values at MIN 1 Majene, West Sulawesi. Primary data were collected through learning observations, interviews with Pancasila teachers and students, and tests or questionnaires to assess students' comprehension before and after the strategy's implementation. Secondary data included documents such as Lesson Plans (RPP), curriculum, and records of school activities. The research subjects were class VI students and their Pancasila teachers. Instruments included comprehension tests, self-reflection questionnaires, observation sheets, and semi-structured interview guidelines to gather both quantitative and qualitative data. The study followed steps including preliminary observations, the design and pilot of a metacognition-based learning model, and data collection through various instruments. Data analysis was performed using descriptive and inferential statistics for quantitative data and thematic analysis for qualitative data, with triangulation employed to ensure the validity and reliability of the findings. The results of this study show that the implementation of metacognition-based learning strategies has proven to be effective in improving students' understanding of Pancasila material in class VI students. Before the implementation of the strategy, most students had a low understanding, but after its implementation, there was a significant increase in the average score of students, which was in the high category. The results of the t-test showed a very significant difference between pre-test and post-test scores, proving that this strategy not only improves comprehension but also has a deeper impact on the learning process, especially for materials that require in-depth conceptual understanding.

Keywords

Implementation, Learning Strategies, Metacognition, Pancasila Learning.



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INTRODUCTION

Metacognition-based learning is an approach that emphasizes students' ability to plan, monitor, and evaluate their own thought processes (Iskandar, 2014). In today's educational context, where the demand to develop critical and independent thinking skills is increasing, this strategy has become relevant to be implemented. However, its implementation still faces various obstacles, such as teachers' lack of understanding of the concept of metacognition, limited time in a dense curriculum, and the tendency of the education system to focus solely on academic results (Kristiyani, 2016). Students are often not accustomed to reflecting on the way they learn or identifying the difficulties they face, so the learning process tends to be passive and less in-depth (Asmani, 2016). This shows the need for a paradigm shift in learning practices, where metacognition is not only considered as an add-on but as the core of the educational process.

On the other hand, the development of science and technology requires students to have *lifelong learning skills*, which can be built through strengthening metacognition (Muktamar *et al.*, 2024). Metacognition-based learning allows students to be more independent in managing their learning process (Tusyadiah *et al.*, 2024), increase awareness of their strengths and weaknesses (Sucipto, 2017), and develop strategies to overcome learning challenges (Darwati *et al.*, 2021). However, the success of this strategy relies heavily on systemic support, including adequate teacher training (Mbato *et al.*, 2022), the development of teaching materials that encourage critical reflection (Hepsi, 2012), and the creation of learning environments that support exploration and collaboration (Mbato *et al.*, 2024). Thus, this shows that despite the challenges, metacognition-based learning has great potential to transform education into more meaningful and oriented towards the development of higher-level thinking skills.

The implementation of metacognition-based learning strategies is becoming especially urgent in the context of modern education, where the demand to develop critical, creative, and independent thinking skills is increasing (Zaswita *et al.*, 2023). In an era full of information and rapid change, students are not only required to master the content of knowledge but also to be able to manage their learning process effectively. Metacognition allows students to plan, monitor, and evaluate their understanding so that they can become independent and adaptive learners (Wahyuni *et al.*, 2024). Without metacognitive skill development, students are at risk of getting caught up in rote and less meaningful learning, which ultimately hinders their ability to deal with complex challenges in the future (Handayani *et al.*, 2022). Therefore, the integration of metacognition-based learning

strategies is not only important to improve academic outcomes but also to prepare students to become individuals capable of thinking reflectively, solving problems, and continuing to learn throughout life.

Likewise, the implementation of metacognition-based learning strategies in Pancasila subjects at the primary education level is very urgent, considering the importance of instilling Pancasila values as the foundation of the nation's character and identity from an early age (Amroellah *et al.*, 2019). However, the still dominant learning method in the form of memorization and lectures often makes it difficult for students to understand the deep meaning of each Pancasila precept, so these values are not properly internalized (Ronggo *et al.*, 2023). Metacognition-based strategies offer solutions by actively involving students in planning, monitoring, and evaluating their learning process (Siregar, 2017) So that they not only understand the material cognitively but also reflect and apply Pancasila values in their daily lives (Indarini *et al.*, 2013). Without this approach, Pancasila learning risks becoming less meaningful and failing to form a generation that has critical awareness, morality, and a sense of responsibility as citizens. Therefore, the integration of metacognition in Pancasila learning at the basic level is an important step to create more effective learning and long-term impact (Lubis *et al.*, 2022).

Pancasila learning at the elementary education level has a crucial role in instilling national values, morals, and national identity in students from an early age (Arifin, 2023). However, Pancasila material that is abstract and philosophical is often difficult to understand by elementary school students who are still in the concrete-operational cognitive development stage (Utami *et al.*, 2023). This is exacerbated by learning methods that tend to be conventional, such as memorization and lectures, which do not actively involve students in the reflective thinking process (Widiya *et al.*, 2023). Metacognition-based learning strategies are present as a solution to overcome this challenge by emphasizing students' awareness of the way they learn and understand the values of Pancasila. Through this approach, students are invited to plan, monitor, and evaluate their understanding so that learning Pancasila is not only memorizing but also internalizing these values in daily life. Thus, the context of this research emphasizes the importance of transforming Pancasila learning methods that are more meaningful and relevant for students at the basic education level.

One of the main problems in learning Pancasila at the basic education level is teaching methods that are still conventional, such as lectures and memorization, which do not actively involve students in the process of reflective thinking (Suhartono, 2018). Students are often only asked

to memorize the precepts of Pancasila and their explanations without understanding their deep meaning and relevance in daily life (Yusniasih *et al.*, 2022). As a result, Pancasila values are not well internalized, and students tend to have difficulty relating the material to the real context (Alimah, 2021). In addition, teachers often lack a clear understanding of the importance of metacognitive approaches in learning (Syaripuddin *et al.*, 2020), so the learning process focuses more on achieving curriculum targets than developing students' critical thinking skills and self-awareness. This causes Pancasila learning to be less meaningful and unable to form student characters in accordance with national values.

On the other hand, the characteristics of students at the primary education level who are still in the concrete-operational stage of cognitive development demand a learning approach that suits their abilities (Marinda, 2020). Elementary school students tend to understand concrete and visual concepts more easily, while abstract and philosophical Pancasila material is often difficult to understand (Wulandari *et al.*, 2023). Without proper learning strategies, such as metacognition-based approaches that involve planning, monitoring, and self-evaluation, students will have difficulty developing a deep understanding of the values of Pancasila. In addition, the lack of learning facilities and resources that support the reflection and discussion process is also an obstacle to implementing this strategy (Arif, 2024). Therefore, efforts are needed to overcome these problems so that Pancasila learning can be more effective and meaningful for students at the basic education level.

Based on several literature reviews, it has been shown that metacognition-based learning strategies have been shown to be effective in improving students' ability to plan, monitor, and evaluate their learning processes. According to Flavell (1979), metacognition refers to an individual's awareness of their own thought processes and the ability to control those processes. Previous studies, such as those conducted by Schraw *et al.*, (1995), revealed that metacognitive approaches can improve deep understanding and information retention, especially in complex and abstract materials (Lu *et al.*, 2022). In the context of Pancasila learning, metacognition can help students not only memorize the values of Pancasila but also reflect and relate them to daily life. However, most research on metacognition is still focused on science and mathematics subjects, while its implementation in humanities subjects, such as Pancasila, is still rarely explored.

On the other hand, the literature review also revealed that the implementation of metacognition-based learning strategies at the primary education level faces several challenges. Research shows that elementary-age students are still in the stage of cognitive development that requires extra assistance to develop metacognitive abilities. In addition, teachers are often undertrained in applying this approach due to limited understanding and resources. A study by Zohar *et al.* (2013) emphasizes the importance of teacher training and the development of teaching materials that support the metacognition process. In the context of Pancasila, this is becoming increasingly important considering the nature of philosophical and abstract material. Thus, this literature review highlights the need for further research to develop and test metacognition-based learning strategies that are in accordance with the characteristics of Pancasila subjects and the cognitive level of students in primary education.

Based on the literature review, there is a significant gap between theory and practice in the implementation of metacognition-based learning strategies, especially in Pancasila subjects at the basic education level. Theoretically, metacognition is recognized as an effective approach to improve students' deep understanding and reflection skills, especially in abstract materials such as Pancasila (Ramawati, 2020). However, in practice, the implementation of this strategy is still very limited. Based on (Ramadhan, 2018), it shows that teachers more often use conventional methods, such as lectures and memorization, due to the limited understanding of metacognition and the lack of adequate training and resources. In addition, the results of Raafi's (2020) Research also revealed that a dense and exam-outcome-oriented curriculum often hinders the implementation of metacognitive approaches, which take longer to train students to plan, monitor, and evaluate their learning process.

On the other hand, the existing literature focuses more on the implementation of metacognition in science and mathematics subjects, while research on its implementation in social science subjects, such as Pancasila, is still very limited. In fact, Pancasila, as a material that is full of values and philosophy, actually requires a learning approach that encourages critical reflection and internalization of values. This gap shows the need for further research to develop a metacognition-based learning model that is in accordance with the characteristics of Pancasila subjects and the cognitive level of students in primary education. By filling this gap, it is hoped that a learning strategy can be created that not only improves cognitive understanding but also shapes the character of students who are in harmony with the values of Pancasila.

At MIN 1 Majene, the implementation of metacognition-based learning strategies in Pancasila subjects faces a number of challenges that are quite complex. The majority of teachers in teaching still rely on traditional learning methods, such as lectures and memorization, which do not involve students in the process of reflective and critical thinking. Teachers at MIN 1 Majene are often unfamiliar with the concept of metacognition, so they find it difficult to design and implement learning strategies that require students to plan, monitor, and evaluate their own learning process. In addition, limited facilities and infrastructure, such as access to innovative teaching materials and adequate teacher training, are the main obstacles to integrating the metacognition approach into Pancasila learning. A dense, exam-outcome-oriented curriculum also often forces teachers to focus on achieving material targets rather than developing students' high-level thinking skills.

Based on the explanation above, the purpose of this study is to determine the implementation of metacognition-based learning strategies in improving the understanding of Pancasila values material in Class VI MIN 1 students of Majene.

METHOD

This study uses a mixed methods research design that combines qualitative and quantitative approaches (Hendrayadi et al., 2023) to implement metacognition-based learning strategies in Pancasila subjects in MIN 1 Majene. This research was carried out at MIN 1 Majene, which is located in Majene Regency, West Sulawesi Province. This school was chosen as the location of the research because it has characteristics and needs that are relevant to the focus of the research, namely the implementation of metacognition-based learning strategies in improving students' understanding of Pancasila values material

This study combines qualitative and quantitative approaches to explore the implementation of metacognition-based learning strategies in improving understanding of Pancasila values in grade VI MIN 1 Majene. Primary data was obtained through learning observations, interviews with Pancasila teachers and students, and questionnaires or tests to measure students' understanding before and after the implementation of the strategy. Secondary data is obtained from documents such as Learning Implementation Plans (RPP), curriculum, and records of learning activities in schools (Sulung et al., 2024). The main data sources include Pancasila teachers, students, and principals or staff related to curriculum management, while documentation data is in the form of

syllabus, lesson plans, and relevant learning reports. The data analysis aims to assess the extent to which metacognition-based strategies can improve students' understanding of Pancasila values.

The subjects of this study are students of class VI MIN 1 Majene who are studying Pancasila subjects, as well as teachers who teach these subjects. The selection of class VI students is based on the consideration that they already have basic abilities in reading and writing, as well as being in a stage of cognitive development that allows them to begin to teach metacognitive skills. In addition to students, teachers are also the subject of research because of their crucial role in designing and implementing metacognition-based learning strategies. This research involved class VI students of MIN 1 Majene who were selected to ensure the representation of the learning conditions at Islamic Elementary School.

This research instrument includes a comprehension test to measure students' cognitive improvement towards Pancasila material, a self-reflection questionnaire to evaluate students' metacognitive awareness in the learning process, an observation sheet to monitor learning activities and student-teacher interaction during the implementation of the strategy, as well as a semi-structured interview guideline to explore the perceptions and experiences of teachers and students related to the implementation of metacognition-based learning. The comprehension test is designed based on Pancasila learning indicators, while the self-reflection questionnaire is focused on students' ability to plan, monitor, and evaluate their learning process. Observation sheets were used to record class dynamics, while interviews aimed to obtain in-depth qualitative data on the implementation of the implementation. These instruments are designed to collect comprehensive data to evaluate the effectiveness of metacognition-based learning strategies.

The steps of this research consist of (a) The initial stage includes observation and interviews with teachers and students to understand the existing learning conditions. (b) Furthermore, a metacognition-based learning model is designed that involves planning, monitoring, and self-evaluation of students. (c) This model was piloted in an experimental class, while the control class used conventional learning methods. (d) Data were collected through comprehension tests, reflection questionnaires, observation of learning activities, and in-depth interviews.

The data analysis in this study was carried out in mixed methods, combining quantitative and qualitative approaches. Quantitative data, such as comprehension test results and self-reflection questionnaires, were analyzed using descriptive and inferential statistics (e.g., t-test) (Mustafidah et al., 2020) to measure the improvement of students' understanding and metacognitive awareness

before and after the implementation of the strategy. Meanwhile, qualitative data from observations and interviews were analyzed thematically to identify patterns and success in the implementation of metacognition-based learning strategies. Data triangulation was carried out by comparing the results of various instruments to ensure the validity and reliability of the findings (Susanto et al., 2023).

FINDINGS AND DISCUSSION

Findings

This study aims to determine the effect of the implementation of metacognition-based learning strategies on students' understanding of Pancasila material in class VI students. The researcher distributed the questionnaire to 18 respondents, and the data obtained was then analyzed to measure students' understanding before and after the implementation of the learning strategy.

Understanding Before Implementing Metacognition-Based Learning Strategies

Based on data obtained before the implementation of metacognition-based learning strategies, the tabulation results show that the majority of students have a low understanding of Pancasila material. The results of data processing showed an average student score of 22.27 (rounded to 22), which was included in the "Low" category with a score range of 21-25, based on the specified category. Here is the distribution of the frequency of students' understanding before the implementation of the strategy:

Table 1. Distribution of Frequency of Student Comprehension Before Implementation of Strategy

No.	Criterion	Frequency	Category	Percentage
1.	> 30	1	Very high	5,5%
2.	26 – 30	5	Tall	27,7%
3.	21 – 25	3	Low	16,6%
4.	≤ 20	9	Very low	50%
	Total	18		100%

From the table above, it can be seen that 50% of students have very low understanding, while only 5.5% have very high understanding.

Understanding After the Implementation of Metacognition-Based Learning Strategies

After the implementation of metacognition-based learning strategies, there was a significant improvement in student understanding. The student's average score increased to 26.72 (rounded to 27), which falls into the "High" category with a score range of 26-30. Here is the distribution of the frequency of students' understanding after the implementation of the strategy:

Table 2. Distribution of the Frequency of Students' Understanding After the Implementation of the Strategy

No.	Criterion	Frequency	Category	Percentage
1.	> 30	4	Very high	22,2%
2.	26 – 30	6	Tall	33,3%
3.	21 – 25	5	Low	27,7%
4.	≤ 20	3	Very low	16,6%
Total		18		100%

From the table above, it can be seen that 22.2% of students have a very high understanding, 33.3% of students have a high understanding, and only 16.6% of students still have a very low understanding after the implementation of metacognition-based learning strategies.

Questionnaire Validity and Reliability Test

To ensure that the instruments used in this study are valid and reliable, a validity and reliability test analysis was carried out on the questionnaire used (Amalia *et al.*, 2023). The results of the validity test showed that all questionnaire items were valid because the calculated *r* value was greater than the *r* of the table, and the significance value was less than 0.05. The following are the results of the questionnaire validity test:

Table 3. Results of the Questionnaire Validity Test

No.	r count	R table	Significance Value	Information
1.	0,586	0,468	0,011	Valid
2.	0,490	0,468	0,039	Valid
3.	0,715	0,468	0,001	Valid
4.	0,629	0,468	0,005	Valid
5.	0,654	0,468	0,003	Valid
6.	0,720	0,468	0,001	Valid
7.	0,478	0,468	0,045	Valid
8.	0,553	0,468	0,017	Valid
9.	0,535	0,468	0,022	Valid
10.	0,605	0,468	0,008	Valid

Based on Table 3. The results of the reliability test using Cronbach's Alpha showed a value of 0.798, which is greater than 0.60, which indicates that the questionnaire used has good reliability (Siregar, 2017).

The results of the reliability test analysis can be seen in the following Table 4:

Table 4. Questionnaire Reliability Results

Reliability Statistics	
Cronbach's	
Alpha	N of Items
.798	10

Based on the results of the reliability test that has been carried out with the number of question items of 10 items in 18 respondents, the result of Cronbach's alpha of 0.798 has been obtained and declared reliable because 0.798 is greater than 0.60.

Normality Test and Hypothesis Test

To test whether the data is normally distributed, a normality test is carried out using the Shapiro-Wilk test (Rini *et al*, 2015). The results of the normality test showed that the pre-test and post-test data were distributed normally because the significance value for both was greater than 0.05.

Table 5. Results of the Normality Test

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Mr.	Statistic	Df	Mr.
Pre-test	.185	18	.106	.947	18	.386
Post-test	.101	18	.200*	.969	18	.775

*. This is a lower bound of the true significance.

Based on the table above, it can be seen that the pre-test data and the post-test data are normally distributed using Shapiro-Wilk (Saputro *et al*, 2020). In this normality test, the significance value for the pre-test. The data was 0.386, and the post-test data was 0.775. Data is declared to be normally distributed if the significance value is greater than the value of 0.05, and in the pre-test and post-test data, the significance value is greater than 0.05. So, it can be concluded that the two data are normally distributed, and the hypothesis test that will be used is the T-test (paired sample t-test).

Table 6. T Test Results

Paired Samples Test								
	Paired Differences							
	95% Confidence Interval of the							
	Difference							
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	Df	Sig. (2-tailed)
Pair 1 Pre-test – Post-test	-4.44444	5.86337	1.38201	-7.36023	-1.52866	-3.216	17	.005

The hypothesis of this research is:

1. Main Hypothesis (H_1): The implementation of metacognition-based learning strategies can improve the understanding of grade VI students at MIN 1 Majene on the material of Pancasila values.
2. Hypothesis Zero (H_0): The implementation of metacognition-based learning strategies does not have a significant influence on improving the understanding of grade VI students in MIN 1 Majene on the material of Pancasila values.

Based on Table 6 of these results, the hypothesis test was carried out using a t-test (paired sample t-test). The results of the t-test showed a significance value of 0.005, which is smaller than 0.05, so it can be concluded that the implementation of metacognition-based learning strategies has a significant influence on improving students' understanding of Pancasila material.

Based on data analysis, it can be concluded that the implementation of metacognition-based learning strategies is effective in increasing students' understanding of Pancasila material in class VI students. Before the implementation of the strategy, students' understanding tends to be low, while after the implementation of the strategy, students' understanding increases significantly, with more students showing high understanding.

Discussion

This study aims to determine the influence of the implementation of metacognition-based learning strategies in improving students' understanding of Pancasila material in class VI. Based on the results of data analysis obtained through pre-test and post-test, it is known that there is a significant change in student understanding after the implementation of metacognition-based learning strategies. The results of the t-test (paired sample t-test) showed that the significance value was 0.005, which is smaller than 0.05, so it can be concluded that the implementation of this strategy has a significant effect in improving students' understanding of Pancasila material.

Prior to the implementation of metacognition-based learning strategies, the majority of students were in the category of low and very low understanding. This is reflected in the results of the pre-test frequency distribution, where 50% of students are in the very low category and only 5.5% of students are in the very high category. The average pre-test score obtained was 22.27, which shows that most students still do not have enough understanding of Pancasila material. According to Bloom's, (1956) theory, low understanding can be caused by a lack of proper implementation of strategies in the learning process. Bloom, (1956) argues that effective learning must pay attention to

the cognitive dimension, which includes knowledge mastery, understanding, application, analysis, synthesis, and evaluation. At this early stage, many students have not reached a sufficient level of understanding to apply the concept of Pancasila in their daily lives. This is in line with findings in various studies that show that without proper strategies, students' understanding of subject matter tends to be limited (Schraw & Dennison, 1994)

After the implementation of metacognition-based learning strategies, post-test results showed significant changes, where most students were in the higher category of understanding. About 22.2% of students are in the very high category, while the other 33.3% are in the high category. The average post-test score obtained was 26.72, which indicates a significant improvement in student understanding. These results are in line with the theory put forward by Flavell (1979), who explains that metacognition-based learning can help students to better understand and control their own thought processes, which in turn improves their understanding of the subject matter.

Metacognition, according to Brown *et al.*, (1987) It is the ability to recognize and understand one's own thought processes, which include planning, monitoring, and evaluating comprehension (Ku *et al.*, 2014). In the context of this research, the implementation of metacognition-based strategies can help students in planning learning strategies, monitor their understanding, and evaluating their learning outcomes. This has been shown to be effective in improving learning outcomes, as seen in the improvement of students' post-test scores after the implementation of this strategy.

One of the important components of metacognition-based learning is the development of students' self-awareness of their own understanding. Research conducted by Schraw (1998) shows that students who engage in metacognitive processes are better able to recognize strengths and weaknesses in their understanding, as well as develop more effective strategies for solving problems. In this study, students involved in metacognition-based learning showed better ability to identify and correct errors in their understanding of Pancasila material.

The use of metacognition-based learning strategies is also in line with the theory of constructivism put forward by Vygotsky (2012), who argues that effective learning occurs when students engage in the active process of building their own knowledge. In this case, metacognition plays an important role in enabling students to structure their knowledge in a more structured and organized manner, which supports a deeper understanding of the subject matter (Hasanuddin, 2020). The application of this strategy in learning Pancasila allows students to be more active in understanding Pancasila concepts and connecting them to their daily lives.

In addition, metacognition can also increase students' motivation to learn. According to Zimmerman (2002) Students who have good metacognitive abilities tend to have a greater sense of responsibility for their learning process, as they feel more able to control and direct their learning (Azevedo *et al.*, 2012). In this study, the increase in students' post-test scores after the implementation of metacognition-based strategies can be considered as an indication that students become more motivated to understand Pancasila material better.

The results of this study also show that although most students experience significant improvements, there are still a number of students who show low or very low understanding despite having implemented metacognition-based learning strategies. This may be due to various factors, such as differences in students' learning styles, students' readiness levels in adopting metacognitive strategies, or other external factors. More research is needed to explore these factors and identify ways to further improve the effectiveness of metacognition-based learning.

One of the strengths of metacognition-based learning strategies is their ability to be applied in a variety of learning contexts. As revealed by Pressley & McCormick, (1995) Metacognitive strategies are not limited to one type of subject matter but can be used to improve understanding in various fields (McCormick *et al.*, 2012; Pressley *et al.*, 2009), including the Pancasila material studied in this study. The application of this strategy in Pancasila learning shows that metacognition can help students organize information, connect different concepts, and improve their critical thinking skills.

Overall, the results of this study support the conclusion that the implementation of metacognition-based learning strategies is effective in improving students' understanding of Pancasila material. This research is in line with previous findings that show that metacognition can assist students in improving understanding, increasing active engagement, and improving their learning outcomes (Badaruddin *et al.*, 2024). Therefore, the use of this strategy in Pancasila learning in the future can be a very useful alternative to improve the quality of learning in the classroom.

CONCLUSION

The implementation of metacognition-based learning strategies has a significant influence on increasing students' understanding of Pancasila material in class VI students. Before the implementation of the strategy, most students had a low understanding, with the average pre-test score being in the low category. However, after the implementation of this strategy, there was a

significant increase, with the average post-test score increasing to the high category. This shows that metacognition-based learning strategies are effective in helping students to develop a better understanding of the material being taught.

In addition, the results of the t-test showed that the difference between pre-test and post-test scores was significant, proving that the implementation of metacognition-based learning strategies not only improved students' understanding but also had a deeper impact on the learning process. Therefore, this strategy can be considered an effective method to use in learning, especially for materials that require a deeper conceptual understanding, such as Pancasila.

REFERENCES

- Alimah, N. (2021). *Melatih Ketrampilan Berfikir Kritis Siswa Melalui Strategi Active Learning Pada Mata Pelajaran PPKn di MI Darul'Ulum Kendal Ngawi* (Doctoral dissertation, IAIN Ponorogo). <https://core.ac.uk/download/pdf/132421372.pdf>.
- Amalia, A. N., & Arthur, R. (2023). *Penyusunan Instrumen Penelitian: Konsep, Teknik, Uji Validitas, Uji Reliabilitas, dan Contoh Instrumen Penelitian*. Penerbit NEM.
- Amroellah, A., & Suarmika, P. E. (2019). Analisis Pengaruh Keterampilan Metakognitif Terhadap Kemampuan Berpikir Kritis Pada Mata Pelajaran PKN Kelas V di Gugus 2 Kecamatan Panji. *Education Journal: Journal Educational Research and Development*, 3(2), 73-80.
- Arif Efendi A. S., S. P. M. P. (2024). *Buku Ajar Pengembangan Sumber Belajar dan Media Pembelajaran Pendidikan Nonformal Berbasis Project-Based Learning*. Penerbit KBM Indonesia.
- Arifin, M. Z. (2023). Strategi pendidikan Pancasila dalam membentuk nilai-nilai kebangsaan pada anak usia dini. *Al-Mikraj Jurnal Studi Islam Dan Humaniora* (E-ISSN 2745-4584), 4(1), 42-50. <https://doi.org/10.37680/almikraj.v4i1.3007>.
- Asmani, J. M. (2016). *Tips Efektif Cooperative Learning: Pembelajaran Aktif, Kreatif, dan Tidak Membosankan*. Diva Press.
- Azevedo, R., Behnagh, R. ., Duffy, M., Harley, J. ., & Trevors, G. (2012). Metacognition and self-regulated learning in student-centered learning environments. In *Theoretical foundations of learning environments* (pp. 171–197). Routledge.
- Badaruddin, S., Muhkam, M. F., Syajida, N., & ... (2024). The Influence of Active Learning By Integrating Religious Moderation Values on PPKn Learning Outcomes By Students. *JED (Jurnal Etika Demokrasi)*, 9(2), 134-144. <https://doi.org/10.26618/jed.v>
- Bloom, B. (1956). A taxonomy of cognitive objectives. *New York: McKay*.
- Campione, J. C., & Brown, A. (1987). Metacognitive components of instructional research with problem learners. *Metacognition, Motivation, and Understanding*, 117–140.
- Darwati, I. M., & Purana, I. M. (2021). Problem Based Learning (PBL): Suatu model pembelajaran untuk mengembangkan cara berpikir kritis peserta didik. *Widya Accarya*, 12(1), 61-69. <https://doi.org/10.46650/wa.12.1.1056.61-69>
- Flavell, J. (1979). Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry. *American Psychologist*, 34, 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>
- Handayani, I. P., & Irawan, D. (2022). Keterampilan Metakognitif Ditinjau Dari Perspektif Taksonomi Bloom Edisi Revisi Dalam Pembelajaran Pai. *Studia Religia: Jurnal Pemikiran Dan*

- Pendidikan Islam*, 6(2), 175–189. <https://doi.org/10.30651/sr.v6i2.13038>
- Hasanuddin, M. I. (2020). Pengetahuan Awal (Prior Knowledge) : Konsep dan Implikasi Dalam Pembelajaran. *Edisi : Jurnal Edukasi Dan Sains*, 2(2), 217–232. <https://ejournal.stitpn.ac.id/index.php/edisi>
- Hendrayadi, Kustati, M., & Sepriyanti, N. (2023). Mixed method research. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, 6(4), 2402–2410. <https://journal.universitaspahlawan.ac.id/index.php/jrpp/article/view/21905/15436>
- Hepsi, H. (2012). Pengembangan Bahan Ajar dan Instrumen untuk Meningkatkan Berpikir Reflektif Matematis dan Kemandirian Belajar Berbasis Pendekatan Metakognitif. *Pasundan Journal of Mathematics Education : Jurnal Pendidikan Matematika*, Vol 2 No. 1, 1–19. <https://doi.org/10.23969/pjme.v2i1.2464>
- Hindayati Mustafidah1, Adi Imantoyo2, S. S. (2020). Pengembangan-Aplikasi-Uji-T-Satu-Sampel. *Jurnal Informatika*, 8(2), 245–252.
- Indarini, E., Sadono, T., & Onate, M. E. (2013). Pengetahuan Metakognitif untuk Pendidik dan Peserta Didik. *Satya Widya*, 29(1), 40. <https://doi.org/10.24246/j.sw.2013.v29.i1.p40-46>
- Iskandar, S. M. (2014). Pendekatan Keterampilan Metakognitif Dalam Pembelajaran Sains Di Kelas. *Erudio Journal of Educational Innovation*, 2(2), 13–20. <https://doi.org/10.18551/erudio.2-2.3>
- Kristiyani, T. (2016). *Self-regulated learning: Konsep, implikasi dan tantangannya bagi siswa di Indonesia*. Sanata Dharma University Press.
- Ku, K., & Ho, I. (2014). Metacognitive strategies that enhance critical thinking. *Metacognition and Learning*, 5, 251–267. <https://doi.org/10.1007/s11409-010-9060-6>
- Lu, P., Schroeder, S., Burris, S., Rayfield, J., & Baker, M. (2022). The Effectiveness of a Metacognitive Strategy during the Reading Process on Cognitive Allocation and Subject Matter Retention. *Journal of Agricultural Education*, 63(2), 201–218. <https://doi.org/10.5032/jae.2022.02201>
- Lubis, M. A., Dalimunthe, H., & Azizan, N. (2022). *Model-Model Pembelajaran PPKn di SD/MI Teori Dan Implementasinya Untuk Mewujudkan Pelajar Pancasila*. Samudra Biru.
- Marinda, L. (2020). Teori Perkembangan Kognitif Jean Piaget Dan Problematikanya Pada Anak Usia Sekolah Dasar. *An-Nisa' : Jurnal Kajian Perempuan Dan Keislaman*, 13(1), 116–152. <https://doi.org/10.35719/annisa.v13i1.26>
- Mbato, C. L., Albertus Bagus Laksana, S. J., Sarkim, T., Alexander Hendra Dwi Asmara, S. J., M, T. A. H., Sungging, F., & Press, S. D. U. (2022). *Pendidikan Indonesia Masa Depan: Tantangan, Strategi, Dan Peran Universitas Sanata Dharma*. Sanata Dharma University Press.
- Mbato, C. L., Budiraharjo, M., Sumitro, Y. F., M, T. A. H., & Press, S. D. U. (2024). *Paradigma Pendidikan Memerdekakan: Mentransformasi Arena Mengajar Menjadi Ruang Belajar*. Sanata Dharma University Press.
- McCormick, C. B., Miller, G. E., & Pressley, M. (2012). *Cognitive Strategy Research: From Basic Research to Educational Applications*. Springer, New York.
- Muktamar, A., Jata, I. W., Sos, S., Sofyan, A., Abroto, S. P., Sari, E., ... & Pd, M. (2024). *Dasar Pendidikan*. Cendikia Mulia Mandiri.
- Pressley, M., & Harris, K. (2009). Cognitive Strategies Instruction: From Basic Research to Classroom Instruction. *Journal of Education*, 189, 77–94. <https://doi.org/10.1177/0022057409189001-206>
- Pressley, M., & McCormick, C. (1995). Cognition, teaching, and assessment. (No Title).
- Raafi, R. (2020). Studi Implementasi Manajemen Kurikulum Sekolah Islam Terpadu di SDIT Magelang. *Tesis Universitas Muhammadiyah Magelang*, 155.
- Ramadhan, M. R. (2018). *Tingkat Metakognitif Siswa Dalam Pembelajaran Pendidikan Agama Islam Berbasis Masalah (Studi Kasus di SDN Kendangsari I dan II Surabaya)*. xv–115.
- Ramawati, R. (2020). Pengaruh Strategi Pembelajaran Metakognitif Terhadap Hasil Belajar PKn

- Siswa Kelas X SMA Negeri 1 Aek Natas Kabupaten Labuhanbatu Utara Tahun Pembelajaran 2016/2017. *Civitas (Jurnal Pembelajaran Dan Ilmu Civic)*, 6(2), 44-51.
- Rini, D. S., & Faisal, F. (2015). Perbandingan Power of Test dari Uji Normalitas Metode Bayesian, Uji Shapiro-Wilk, Uji Cramer-von Mises, dan Uji Anderson-Darling. *Jurnal Gradien*, 11(2), 1-5.
- Ronggo, W., Bayu, I., & Dhiva, M. R. N. A. (2023). Pengembangan Karakter Siswa melalui Pembelajaran PKn Berbasis Kontekstual. *Widya Didaktika Jurnal Ilmiah Kependidikan*, 2(2), 62-71.
- Saputro, N. V., Masturi, & Supriyadi. (2020). The effectiveness of instructional media based on lectora inspires student achievement. *Journal of Physics: Conference Series*, 1567(2). <https://doi.org/10.1088/1742-6596/1567/2/022063>
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26(1-2), 113-125. <https://doi.org/10.1023/a:1003044231033>
- Schraw, G., & Dennison, R. S. (1994). Assessing Metacognitive Awareness. *Contemporary Educational Psychology*, 19(4), 460-475. <https://doi.org/https://doi.org/10.1006/ceps.1994.1033>
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7, 351-371.
- Siregar, N. (2017). *Pembelajaran Matematika Nurfauziah Siregar FTIK , IAIN Padangsidimpuan*. 2(2), 1-20.
- Siregar, S. (2017). *Metode Penelitian Kuantitatif: dilengkapi dengan perbandingan perhitungan manual dan SPSS*.
- Sucipto, S. (2017). Pengembangan Ketrampilan Berpikir Tingkat Tinggi dengan Menggunakan Strategi Metakognitif Model Pembelajaran Problem Based Learning. *Jurnal Pendidikan (Teori Dan Praktik)*, 2(1), 77. <https://doi.org/10.26740/jp.v2n1.p77-85>
- Suhartono, E. (2018). Perubahan pola pembelajaran PKn yang tekstual ke pola kontekstual (CTL). *Jurnal Teori dan Praksis Pembelajaran*, 3(1), 1-12.
- Sulung, U., & Muspawati, M. (2024). Memahami sumber data penelitian: Primer, sekunder, dan tersier. *Edu Research*, 5(3), 110-116.
- Susanto, D., Risnita, & Jailani, M. S. (2023). Teknik Pemeriksaan Keabsahan Data Dalam Penelitian Ilmiah. *Jurnal QOSIM Jurnal Pendidikan Sosial & Humaniora*, 1(1), 53-61. <https://doi.org/10.61104/jq.v1i1.60>
- Syaripuddin, S., Fauzi, A., & Ariswoyo, S. (2020). Peningkatan Kemampuan Penalaran Matematis Siswa MTS Melalui Pendekatan Metakognitif. *Jurnal MathEducation Nusantara*, 3(2), 55-64.
- Tusyadiah, H., Jannah, R., & Gusmaneli. (2024). Mengoptimalkan Pengalaman Belajar Melalui Penerapan Strategi Dan Implementasi Yang Efektif. *Jurnal Teknologi Pendidikan Dan Pembelajaran (JTTP)*, 1(04), 663-669.
- Utami, R. D., Wibawa, S., & Marzuki. (2023). Pemanfaatan Aplikasi Educaplay Pada Pembelajaran Pendidikan Pancasila Materi Aturan di Rumah dan Sekolah. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 8(3), 5808-5818. <https://journal.unpas.ac.id/index.php/pendas/article/view/11810>
- Veenman, M. V. J., Van Hout-Wolters, B. H. A. M., & Afflerbach, P. (2006). Metacognition and learning: Conceptual and methodological considerations. *Metacognition and Learning*, 1(1), 3-14. <https://doi.org/10.1007/s11409-006-6893-0>
- Vygotsky, L. S. (2012). *The collected works of LS Vygotsky: Scientific legacy*. Springer Science & Business Media.
- Wahyuni, E., Muchtar, M., & Ahmad, F. (2024). Implementasi Kurikulum Islam Terpadu Dalam Membangun Kemampuan Metakognitif Siswa SMP Islam Terpadu Suara Dai Muda Langkat. *Journal Millia Islamia*, 3(1), 75-86.
- Widiya, A. W., & Radia, E. H. (2023). Pengaruh Model Pembelajaran Inkuiri Terbimbing Terhadap Kemampuan Berpikir Kritis dan Hasil Belajar IPS. *Aulad: Journal on Early Childhood*, 6(2), 127-

136. <https://doi.org/10.31004/aulad.v6i2.477>

- Wulandari, N. S., Sekarsari, A. D., Mulyati, D., Ramadhani, A. P., & Wijayama, B. (2023). *Media Pembelajaran Pendidikan Pancasila Kreatif dan Inovatif*. Cahya Ghani Recovery. <https://books.google.co.id/books?id=UufPEAAAQBAJ>
- Yau, C. B., & Rauf, R. A. A. (2019). *Conceptual and Theoretical Framework for Learning Molecular Geometry using Metacognitive Strategies*.
- Yusniasih, & Linawati, L. (2022). BuLe Pancasila untuk Pembelajaran Butir-butir Pengamalan Pancasila di Kelas III SD Negeri 2 Kertosari. *Jurnal Media Edukasi Dan Pembelajaran*, 1(1), 35–44.
- Zaswita, H., Akmal, A., Ismail, I., & Suhertina, S. (2023). Penerapan Strategi Pembelajaran Metakognitif Terhadap Keterampilan Berpikir Kritis Siswa. *TSAQIFA NUSANTARA: Jurnal Pembelajaran Dan Isu-Isu Sosial*, 2(1), 1. <https://doi.org/10.24014/tsaqifa.v2i1.20191>
- Zimmerman, B. J. (2002). *Zimmerman - 2002 - Becoming a Self-Regulated Learner An Overview*. 41(2), 64–70.
- Zohar, A., & Barzilai, S. (2013). A review of research on metacognition in science education: current and future directions. *Studies in Science Education*, 49(2), 121–169. <https://doi.org/10.1080/03057267.2013.847261>