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Original Article

Teacher Strategies in Developing Students' Critical Thinking Skills

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Abstract

This study aims to describe teacher strategies in developing critical thinking skills of fifth grade students at SDN Wonolopo 02, Semarang. This study was motivated by the results of initial observations which showed that learning was still carried out conventionally and centered on the teacher, resulting in low student engagement and learning outcomes. This study used a descriptive qualitative method with data collection techniques in the form of questionnaires and interviews involving students, class teachers, and principals. Data validity was obtained through source triangulation to obtain comprehensive and credible results. The results showed that teachers had implemented various strategies, such as managing learning time, sequencing learning activities, selecting media, and implementing student-based learning methods such as Problem-Based Learning (PBL) and Project-Based Learning (PJBL). This strategy supports the development of critical thinking indicators such as interpretation, analysis, evaluation, and inference. Although there are still some obstacles in its implementation, the results of the interview showed an increase in students' critical thinking skills. In conclusion, the implementation of PBL and PJBL with the right strategy can improve students' critical thinking skills, especially with collaborative support between teachers and schools.

Keywords: Strategy, Teacher, Skills, Critical Thinking, Students.

1. Introduction

The curriculum serves as a guide for educators in implementing the learning process to achieve the stated goals. Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Article 3 states that national education functions to develop abilities and shape the character and civilization of a dignified nation in order to educate the life of the nation. Education also aims to develop students' potential to become faithful people, pious, noble characters, healthy, knowledgeable, intelligent, creative, independent, democratic and responsible citizens. This provision shows that education has an important role in fostering critical thinking skills as part of developing students' intelligence, independence, and responsibility. The implementation of the Independent Learning Curriculum is expected to be able to improve the quality of students not only in academic aspects but also in non-academic fields (Vhalery et al., 2022).

From an academic perspective, students are encouraged to think at a basic level and develop high-level thinking skills, so that they have critical thinking skills that are

continuously honed throughout the learning process (Suryaman, 2020). This critical thinking ability is essential in social life, so it needs to be trained and accustomed from an early age through formal educational activities. Critical thinking is an individual's ability to examine and describe an idea or concept in depth to obtain knowledge appropriate and relevant to the realities of the world by evaluating existing evidence (Nantara, 2021). Learning needs to be organized and designed systematically so that learning objectives can be achieved more easily. Learning strategies include interactions between students, teachers, and the environment that act as learning resources (Sanjani, 2021). Applying learning strategies helps teachers make more focused decisions by utilizing all related components so that the learning process can occur effectively and efficiently.

Previous research shows that PBL and PJBL learning models can improve students' critical thinking skills. Halimah et al. (2023) conducted research entitled "*Peningkatkan Kemampuan Berpikir Kritis Dalam Pembelajaran IPA Melalui Penerapan Model Pembelajaran Problem-based learning (PBL) di Sekolah Dasar*" shows that science learning using the PBL model can improve critical thinking skills. Research conducted by Kartikasari et al. (2021) entitled "*Penerapan Model PBL untuk Meningkatkan Kemampuan Berpikir Kritis Siswa pada Kelas IV Sekolah Dasar*" shows that the PBL model can improve students' critical thinking skills. Then, research conducted by Munawwaroh et al. (2023) entitled "*Peningkatan Keterampilan Berpikir Kritis dengan Menggunakan Model Pembelajaran Project Based Learning (PjBL) berbasis STEM pada Materi Kalor dan Perpindahannya di Kelas V SD Negeri Ploso*" shows that the STEM-based PJBL learning model can improve critical thinking skills.

Elementary-level learning should create opportunities for students to explore ideas, ask questions, and solve real-life problems. Learning models such as Problem-Based Learning (PBL) and Project-Based Learning (PJBL) can create an active, participatory learning situation and encourage students to think critically and independently. However, based on the initial observations at SD Negeri Wonolopo 02, learning is still running conventionally and tends to be teacher-centered. Students show differences in their understanding and response in participating in learning. Some students enthusiastically understand the material, others appear passive and wait for friends to complete assignments. The level of learning achievement in grade V is still low, around 50%, and many students have difficulty understanding evaluation questions. This shows that learning has not been optimally designed to encourage active student involvement or the development of critical thinking skills. Learning at SDN Wonolopo 02 is still conventional and does not allow students to develop critical thinking skills. This research is important to make a real contribution to improving the quality of learning in elementary schools, especially in developing critical thinking skills through a more active and contextual approach. In addition, the results can be a reference for teachers, schools, and policymakers in optimizing the implementation of PBL and PJBL learning models. Hence, this study aims to examine teacher strategies in implementing PBL and PJBL models and identify obstacles and solutions that arise in the implementation process to support students' critical thinking skills.

2. Literature Review

2.1. Learning Strategy

Teachers have a vital role in managing the learning process. In practice, a teacher is expected to have a good understanding and be able to apply various learning strategies (Sutikno, 2021). Etymologically, strategy can be interpreted as a particular strategy, method, or technique. Terminologically, strategy refers to a guide or general steps to achieve predetermined goals. Learning strategies are concrete actions of teachers in delivering material through specific approaches or methods that are considered more effective and efficient (Rambe et al., 2023). In other words, learning strategies are tactics teachers use in the classroom learning process. Diverse and interactive learning strategies involving the active participation of students can create a lively and enjoyable classroom atmosphere (RimahDani et al., 2023). Learning strategies are concrete efforts by educators to deliver material through specific patterns that are believed to be more optimal and efficient. In other words, this strategy is a series of systematic and structured steps that are logically designed to facilitate the achievement of learning goals (Putri et al., 2024). It can be concluded that learning strategies are planned methods or steps used by teachers to help students achieve learning goals effectively and efficiently.

2.2. Critical Thinking

Critical thinking is an essential skill that needs to be developed early on in elementary school students. According to Supriyanto et al. (2022), critical thinking involves the ability to analyze, evaluate, and solve problems logically, which is an important basis for facing the challenges of the 21st century. Problem-Based Learning (PBL) is an effective learning strategy for developing critical thinking skills. This model is centered on students, requiring them to actively solve real problems through investigation and collaboration so that it can significantly improve critical thinking skills compared to conventional learning models or inquiry. Therefore, in the context of learning in SDN Wonolopo 02, implementing the PBL strategy combined with efforts to increase students' learning motivation is very important. Teachers are expected not only as material providers but also as facilitators who direct students to actively seek, evaluate, and construct knowledge independently.

2.3. Previous Research

In this empirical study, relevant research will be described to support the development of this research. The following is a description of previous research. Research conducted by Salem et al. (2024) entitled "*Strategi Guru Dalam Meningkatkan Kemampuan Berpikir Kritis Siswa pada Mata Pelajaran IPS Kelas IV MIS AL-Hidayah Leuwohung*" shows that the application of inquiry methods and problem-based learning can help improve students' critical thinking skills in social studies subjects. Research conducted by Winarti et al. (2022) entitled "*Penerapan Model Pembelajaran Project Based Learning untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Kelas III Sekolah Dasar*" shows that the use of project-based learning models has been proven effective in developing critical thinking skills in students at elementary school level.

Research by Firdausi et al. (2021) shows that critical thinking skills begin to be effectively trained in grades IV and V of elementary school, and their development can be carried out through various innovative learning strategies such as Problem-Based Learning (PBL), Project Learning, Discovery Learning, Guided Inquiry, to the open-ended Think Talk Write approach. Strategy Problem-Based Learning is specifically considered most effective in improving critical thinking skills because it links learning to real situations, motivating

students to find solutions to problems actively. Thus, teachers at SDN Wonolopo 02 need to design student-centered learning strategies, utilize various innovative models, and create a learning atmosphere that fosters students' curiosity and critical thinking skills.

3. Methods

This study uses a descriptive qualitative method to describe the teacher's strategy in developing critical thinking skills of grade V students at SDN Wonolopo 02, located at Jalan Raya Kuripan, Wonolopo, Mijen District, Semarang City, Central Java. This approach was chosen because it allows researchers to explore data naturally through direct interaction with research subjects using questionnaires and interview techniques. According to Sugiyono (2020), qualitative research is conducted under reasonable conditions (natural setting), where the researcher acts as a key instrument, data collection techniques are carried out through triangulation (combination), data analysis is inductive, and research results emphasize meaning rather than generalization.

To ensure the validity and depth of the data, this study applies the data source triangulation technique. Triangulation is carried out by collecting data from various parties directly involved in the learning process, namely through questionnaires to students and in-depth interviews with students, class teachers, and principals. The questionnaire was given to grade V students on April 2, 2025, to determine their perceptions of the learning strategies implemented by teachers, especially in developing critical thinking skills. Interviews with students were conducted on the same day to explore their experiences and views more personally, while confirming and completing the findings from the questionnaire. Interviews with class teachers were used to understand the implementation of the strategy from the perspective of the direct implementer in the classroom. In contrast, interviews with the principal were conducted on April 28, 2025, to obtain the perspective of policy and school support for developing critical thinking skills. This triangulation technique helps produce more valid, complete, and in-depth data by comparing and confirming information from various sources.

The data obtained were analyzed qualitatively through three stages: data reduction, data presentation, and conclusion. These three stages were carried out systematically to organize field findings and produce a comprehensive picture of teacher strategies in improving students' critical thinking skills. The limitations of this study lie in the absence of direct observation of the learning process in the classroom. This causes the data to be indirect and highly dependent on the honesty and understanding of respondents when filling out questionnaires and answering interview questions. Therefore, the interpretation of the results is based more on available verbal information and documents than on directly observed classroom dynamics.

4. Result and Discussion

4.1. Research Results

Student responses were evaluated by distributing questionnaires that reflected their experiences during the learning process. Each student provided answers that were then accumulated and averaged. A summary of the results is presented in Figure 1.

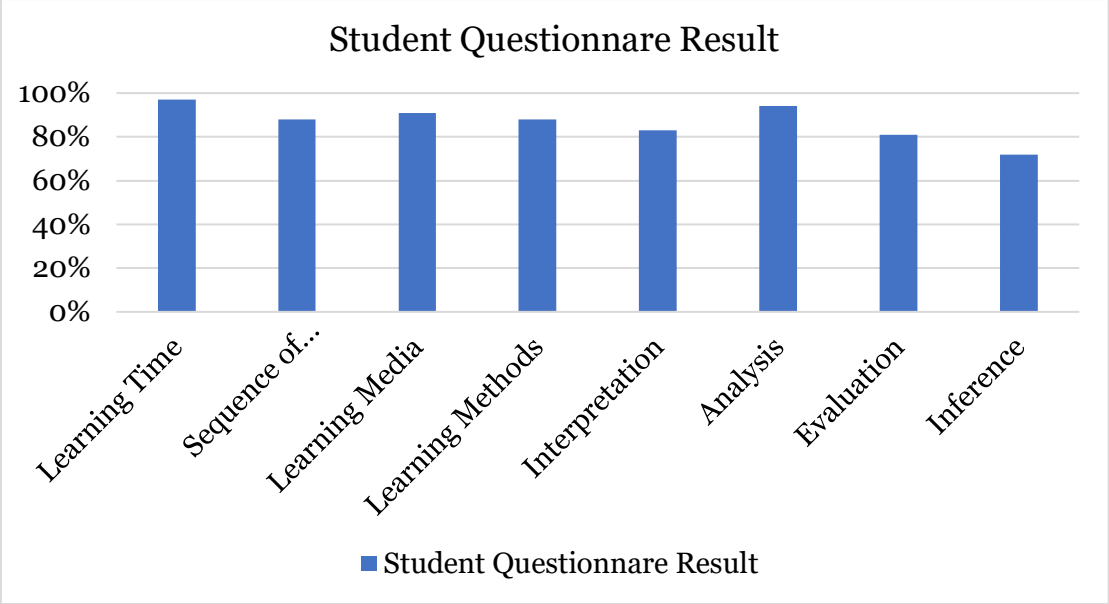

Figure 1. Student Questionnaire Result Diagram

This study examines the relationship between teachers' learning strategies and students' critical thinking skills. Learning strategies are analyzed through four main components: learning time management, sequence of learning activities, learning media, and learning methods. Meanwhile, critical thinking skills are examined based on four indicators: interpretation, analysis, evaluation, and inference.

Based on the questionnaire given to students, it is known that the component of the learning strategy that obtained the highest percentage is time, with a value of 97%. The questionnaire shows that teachers have managed learning time very well and effectively. The learning media component is in the following position with a percentage of 91%, indicating that media use in learning is considered very supportive of the learning process. Furthermore, the components of the sequence of learning activities and learning methods each obtained a percentage of 88%, indicating that both have been implemented quite well by teachers in supporting the success of the learning process.

Regarding critical thinking skills, the analysis indicator showed the most prominent results with a percentage of 94%, which reflects the ability of students to solve problems very well. The interpretation indicator got a percentage of 83%, indicating that the ability to understand and interpret information is quite good. The evaluation indicator got 81%, indicating that the ability to assess and solve problems has developed quite well. Meanwhile, the inference indicator got the lowest results with a percentage of 72%, indicating that the ability to provide reasons for answers still needs to be improved.

Overall, the implementation of learning strategies by teachers has been carried out quite optimally, especially in terms of learning time management and learning media utilization. On the other hand, students' critical thinking skills have developed well, especially in analytical skills, although strengthening is still needed in inference.

4.2. Discussion

The results of the study showed that fifth-grade teachers at SD Negeri Wonolopo 02 had implemented various strategies aimed at developing students' critical thinking skills. The active learning approach is the main foundation applied, which allows students to be directly involved in the learning process through exploration, observation, and discussion. In addition,

the principal also plays a key role through managerial direction, academic supervision, and support for improving teacher capacity.

According to Rohim & Rofiki (2024), the critical thinking indicators that are the focus of this study include interpretation, analysis, evaluation, and inference. Interpretation is reflected in the ability to convey available data and formulate questions asked appropriately. Analytical ability is seen from the accuracy in building problem models and designing appropriate solution strategies. Evaluation is shown through accuracy in calculating and success in solving problems correctly. Meanwhile, inference is seen from the ability to provide reasoning or a logical basis for the answers. These critical thinking indicators will be observed in each principal component of the learning strategy. The main components of the learning strategy include learning time, sequence of learning activities, learning media, and learning methods.

4.2.1. Learning Time

Teachers use learning time in a disciplined manner by starting and ending lessons on time. This was confirmed through a student questionnaire. It shows an average percentage of 97%, showing students' critical thinking skills. The interview results show that although learning time has been utilized well, there is still an opportunity to optimize reflective activities at the end of the session. The evaluation and inference process, such as concluding with students, can be optimized to become part of the learning routine because concluding is an important part of high-level thinking skills that must be continuously developed Sucipta et al. (2023). The analyzed teaching module also indicated that the closing activity still focused on clarification from the teacher, thus opening up space to increase student involvement in actively concluding the learning. The teacher also said that learning carried out for three teaching hours was more effective than learning that only lasted two teaching hours. Learning activities only for two teaching hours made students not optimal in working on projects on the LKPD. The longer duration provides sufficient space for in-depth study of the material, discussion, project work, and student reflective activities. The principal also pays attention to time management through weekly supervision and evaluation by ensuring that the implementation of learning time is in accordance with the semester plan and supports critical thinking activities but still opens up space for improvement, especially in providing time allocation for students' metacognitive activities.

Learning time management at SD Negeri Wonolopo 02 has been going very well, as reflected in the discipline of teachers in starting and ending learning on time and the results of student questionnaires, which showed a satisfaction percentage of 97%. This finding aligns with the research of Nurpaisa & Rustan (2024), which states that effective time management contributes to increasing student focus in critical thinking. However, compared to the findings of Firdausi et al. (2021), which suggested a special time allocation for reflective and metacognitive activities, this study shows that although time is used well, reflection activities are still limited. In this study, teachers have not routinely involved students in compiling learning conclusions, even though the ability to conclude is part of the inference indicator, which is still low (72%). Therefore, when compared, time management at SDN Wonolopo 02 is close to ideal but still needs to be optimized at the final stage of learning that supports independent reflection.

4.2.2. Sequence of Learning Activities

The teacher has arranged a systematic sequence of learning activities using the syntax of the PBL and PJBL models. The PBL syntax in the observed teaching modules includes orienting students to problems, organizing students to learn, guiding group investigations,

developing and presenting results, and analyzing and evaluating the problem-solving process. Activities start from the trigger, exploration, discussion, to presentation of results. At the interpretation stage, students are invited to observe phenomena through visual media and trigger questions in the preliminary activities. This stage effectively encourages students to examine problems and formulate critical questions (Khasanah, 2024). Group discussions are an important part of the analysis stage. The teacher allows students to put forward arguments, compare opinions, and conclude together. Group discussions are included in the activities in the third syntax, namely guiding group investigations. However, in the evaluation and inference aspects, the role students are not yet optimal. The evaluation aspect is found in the fifth syntax, namely, students and teachers discuss the trigger questions again. However, in the evaluation activity, students still need teacher guidance. In addition, in the inference aspect, students can explain the reasons for the answers given, but only when asked by the teacher. The interview results showed that students were rarely asked to assess the effectiveness of solutions or conclude learning. Ideally, students are also allowed to reflect and connect the material with real-life contexts (Ramadhani & Umam, 2025). Through his supervision, the principal encourages teachers to arrange a sequence of activities that can foster critical thinking activities in a gradual and structured manner and emphasizes the use of contextual problem-based learning models.

The fifth-grade teacher of SDN Wonolopo 02 has designed a systematic learning flow that aligns with the syntax of the PBL and PJBL models. Learning activities from the start to the discussion and presentation run according to the flow. This is consistent with Khasanah (2024), which states that the sequence of problem-based learning activities can encourage students' critical thinking skills. In this study, students showed a good ability to analyze and interpret indicators. However, compared to the practice in the research of Ramadhani & Umam (2025), which emphasized the importance of the stages of reflection and independent assessment in the sequence of activities, the learning sequence at SDN Wonolopo 02 has not fully involved students in the final evaluation and independent conclusion activities. The role of the teacher is still dominant in concluding the discussion results. This causes the development of the inference aspect to be less than optimal. Thus, although the sequence of activities has been arranged systematically, compared to previous research, reinforcement is still needed at the final stage, encouraging students to draw their own conclusions and arguments logically.

4.2.3. Learning Media

The learning media teachers use are quite varied, both in digital and concrete media. Digital media used by teachers include PowerPoint and learning videos from YouTube. Meanwhile, concrete media used during learning activities are dioramas, maps, and globes. However, the results of the analysis of the teaching module show that the PowerPoint used is still informative with explicit presentation of material and is only used as a reference source by students. This can hinder critical thinking because students are not trained to find information. The hope is that the media should provide instructions and clues or present contextual problems that encourage students to think critically and formulate ideas before explicitly presenting the material (Harahap et al., 2024). However, learning videos are considered very helpful by students. Through interviews, they stated that it is easier to understand the material if accompanied by visual displays. This supports previous research, which states that interactive digital media effectively improves critical thinking skills, primarily through interpretation and analysis activities (Sastramiharja et al., 2021). In the interpretation aspect, students are given problems through video media that have been shown. Meanwhile, in the analysis aspect, students are allowed to analyze information based on videos

and PPTs shown by the teacher. The principal has supported the use of digital media by providing facilities and training that allow teachers to develop presentations and videos. Learning that is appropriate to the characteristics of students (Nurhayati & Rahmadani, 2023).

The use of learning media by grade V teachers of SD Negeri Wonolopo 02 has shown diversity that supports learning. This finding aligns with the research results of Sastramiharja et al. (2021) and Harahap et al. (2024), which emphasize that visual and interactive media can support the development of critical thinking skills, especially in terms of interpretation and analysis. However, when compared to the recommendations of Harahap et al. (2024), the learning media at SD Negeri Wonolopo 02 is still informative, not entirely problematic or exploratory. For example, PowerPoint only conveys material explicitly and does not provide a stimulus that challenges students to think deeply independently. Students are better able to develop interpretations and analyses through video displays but have not practised drawing conclusions (inferences) based on media. Therefore, compared to ideal practices, the use of media at SDN Wonolopo 02 is varied but needs to be directed to encourage students to find meaning and formulate their own reasons for thinking actively.

4.2.4. Learning Methods

The fifth-grade teacher applies a combination of lectures, discussions, assignments, Project-Based Learning, and Problem-Based Learning. The lecture method is still used to convey initial knowledge, especially abstract material, but is combined with active strategies such as reflective Q&A and group discussions. Reflective questions given by teachers do not focus on memorizing facts but rather explore the reasons behind students' answers, encouraging them to assess the validity of the information (Nurpaisa & Rustan, 2024). Project-Based Learning (PjBL) and Problem-Based Learning (PBL) facilitate students to explore fundamental problems, develop creative solutions, and compile learning products. This allows students to think critically from interpretation to evaluation more naturally (Natalia & Jalinus, 2021; Saputro & Rayahu, 2020). The interpretation aspect arises when teachers use the lecture method to present problems and increase students' understanding. Meanwhile, the evaluation aspect arises when using the group discussion method. However, based on the interview results, participation in group discussions was not evenly distributed, and students still needed guidance in describing solutions in writing. The principal supports this method through teacher training and providing a forum for sharing good practices. The principal also encourages the preparation of teaching modules that integrate differentiated learning so that students with various abilities can still be actively involved.

This study shows that the fifth-grade teachers of SDN Wonolopo 02 have used lecture methods, discussions, assignments, and project-based and problem-based approaches. This strategy is in line with the findings of Nurpaisa & Rustan (2024) and Natalia & Jalinus (2021), which state that a combination of active and participatory methods can improve critical thinking skills. The results of this study indicate that the aspects of interpretation, analysis, and evaluation have developed well. However, compared to the research of Munawwaroh et al. (2023), which shows that STEM-based PJBL can significantly improve all indicators, including inference, the results of this study highlight the challenges in the inference indicator. Students at SDN Wonolopo 02 still depend on teachers to provide reasons for their answers. This indicates that the methods applied have not fully formed the habit of independent and logical thinking. Therefore, there needs to be a strengthening of reflective methods and open questions and answers that challenge students to develop their arguments actively.

5. Conclusion

Based on the research and discussion results, the fifth-grade teachers at SD Negeri Wonolopo 02 have implemented various strategies to develop critical thinking skills in students. The main components of learning strategies, including learning time, sequence of learning activities, learning media, and learning methods, have given rise to critical thinking indicators. The critical thinking indicators that are the focus of this study include interpretation, analysis, evaluation, and inference. Implementing PBL and PJBL with the right strategy can improve students' critical thinking skills, especially with collaborative support between teachers and schools. Although implementing strategies to improve critical thinking skills in fifth grade at SD Negeri Wonolopo 02 still experiences several obstacles, interviews with students, teachers, and principals show that students' critical thinking skills can improve. Various parties, such as teachers and principals, are important in developing students' critical thinking skills.

The strategies teachers implement play an important role in developing the critical thinking skills of fifth-grade students at SDN Wonolopo 02. The implications of these findings underline the importance of teachers' roles in creating learning that encourages students to think analytically, reflectively, and actively. Therefore, it is recommended that teachers continue to develop and implement contextual and participatory learning strategies with active and participatory methods, such as lecture methods, discussions, assignments, project-based approaches, and problem-based approaches. Schools are also expected to support improving teacher competency through regular training. For further research, it is recommended that studies be conducted at different grade or school levels and use a quantitative approach to measure the effectiveness of learning strategies in improving students' critical thinking skills more measurably.

6. References

Firdausi, B. W., Warsono, & Yermiandhoko, Y. (2021). Peningkatan Kemampuan Berpikir Kritis pada Siswa Sekolah Dasar. *Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam*, *11*(2), 229–243. https://doi.org/10.22373/jm.v11i2.8001

Halimah, S., Usman, H., & Maryam, S. (2023). Peningkatkan Kemampuan Berpikir Kritis Dalam Pembelajaran IPA Melalui Penerapan Model Pembelajaran Problem Based Learning (PBL) di Sekolah Dasar. *Jurnal Syntax Imperatif: Jurnal Ilmu Sosial Dan Pendidikan*, *3*(6), 403–413. https://doi.org/10.36418/syntax-imperatif.v3i6.207

Harahap, S. P. R., Andrian, F., & Annisah, S. (2024). Efektivitas Media Interaktif dalam Meningkatkan Kemampuan Berpikir Kritis Siswa pada Pembelajaran IPA. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(1), 5676–5687.

Kartikasari, I., Nugroho, A., & Muslim, A. H. (2021). Penerapan Model PBL Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Pada Kelas IV Sekolah Dasar. *JGPD: Jurnal Gentala Pendidikan Dasar*, *6*(1), 44–56. https://doi.org/10.22437/gentala.v6i1.10124

Khasanah, N. (2024). Strategi Guru dalam Meningkatkatkan Kemampuan Berfikir Kritis Siswa di Tingkat Sekolah Dasar. *Al-Mujahadah: Islamic Education Journal*, *1*(2), 117–130. https://ejournal.stai-alkifayahriau.ac.id/index.php/almujahadah

Munawwaroh, L., Krisnamurti, C. N., & Wahyuni, M. M. S. (2023). Peningkatan Keterampilan Berpikir Kritis dengan Menggunakan Model Pembelajaran Project Based Learning (PjBL) berbasis STEM pada Materi Kalor dan Perpindahannya di Kelas V SD Negeri Ploso. *Jurnal Penelitian, Pendidikan Dan Pengajaran (JPPP)*, *4*(2), 97–102. https://doi.org/10.30596/jppp.v4i2.15030

Nantara, D. (2021). Menumbuhkan Berpikir Kritis pada Siswa melalui Peran Guru dan Peran Sekolah. *Jurnal Teladan*, *6*(1), 25–34.

Natalia, W., & Jalinus, N. (2021). Efektivitas Pengembangan Modul Berbasis Proyek pada Mata Kuliah Kewirausahaan Akademi Komunitas Negeri Pesisir Selatan. *Jurnal Edutech Undiksha*, *9*(2). https://ejournal.undiksha.ac.id/index.php/JEU/index

Nurhayati, & Rahmadani, A. (2023). Peran Kepala Sekolah dalam Meningkatkan Kualitas Pembelajaran. *Journal on Education*, *5*(4), 10960–10968.

Nurpaisa, & Rustan, E. (2024). Strategi Guru dalam Meningkatkan Kemampuan Berpikir Kritis Siswa di SDN 21 Tadette: Analisis Faktor Pendukung dan Penghambat. *Al Birru: Jurnal Ilmiah Bidang Pendidikan Dasar*, *2*(2), 27–32.

Putri, A., Zahara, F., & Gusmaneli, G. (2024). Hakikat Pendidik dalam Strategi Pembelajaran. *Al-Tarbiyah : Jurnal Ilmu Pendidikan Islam*, *2*(3), 98–108. https://doi.org/10.59059/al-tarbiyah.v2i3.1173

Ramadhani, N. F., & Umam, K. (2025). Penerapan Metode Think Pair Share pada Pembelajaran Pendidikan Agama Islam untuk Meningkatkan Keaktifan Belajar Siswa Kelas VIII di SMP Terpadu Tarbiyatun Nasyi'in Paculgowang Diwek Jombang. *IHSAN: Jurnal Pendidikan Islam*, *3*(2), 285–294. http://ejournal.yayasanpendidikandzurriyatulquran.id/index.php/ihsan

Rambe, R. N. K., Putri, D. A., Hasanah, N., Berutu, S. R., Putri, W. A., & Jaffa, Z. A. (2023). Strategi Guru dalam Mengatasi Kesulitan Membaca pada Siswa Kelas II SD Negeri 107399 Bandar Khalifah. *Jurnal Bintang Pendidikan Indonesia (JUBPI)*, *1*(3), 155–162. https://doi.org/10.55606/jubpi.v1i3.1664

RimahDani, D. E., Shaleh, & Nurlaeli. (2023). Variasi Metode dan Media Pembelajaran dalam Kegiatan Belajar Mengajar. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, *7*(2), 672. https://doi.org/10.35931/am.v7i2.2053

Rohim, A., & Rofiki, I. (2024). Profil Kemampuan Berpikir Kritis Siswa dalam Menyelesaikan Soal AKM Numerasi. *Kognitif: Jurnal Riset HOTS Pendidikan Matematika*, *4*(1), 183–193. https://doi.org/10.51574/kognitif.v4i1.893

Salem, Muh. A., Hijrat, K., & Jufri. (2024). Strategi Guru dalam Meningkatkan Kemampuan Berfikir Kritis Siswa pada Mata Pelajaran IPS Kelas IV MIS Al-Hidayah Leuwohung. *Jurnal Ilmiah Pendidikan Dasar (JIPDAS)*, *4*(4), 235–240. https://doi.org/10.37081/jipdas.v4i4.2408

Sanjani, M. A. (2021). Pentingnya Strategi Pembelajaran yang Tepat bagi Siswa. *Jurnal Serunai Administrasi Pendidikan*, *10*(2), 32–37.

Saputro, O. A., & Rayahu, T. S. (2020). Perbedaan Pengaruh Penerapan Model Pembelajaran Project Based Learning (PJBL) dan Problem Based Learning (PBL) Berbantuan Media Monopoli terhadap Kemampuan Berpikir Kritis. *JIPP: Jurnal Imiah Pendidikan Dan Pembelajaran*, *4*(1).

Sastramiharja, U. S., Nathanael, L., Sari, R. W. P., & Kusriani, F. (2021). Pengaruh Penggunaan Media Video terhadap Motivasi Belajar Peserta Didik. *Edutech*, *20*(1), 72–86. https://doi.org/10.17509/e.v20i1.30997

Sucipta, I. W., Candiasa, I. M., & Sudirtha, I. G. (2023). Pengaruh Model Pembelajaran Berbasis Masalah dan Bentuk Asesmen Formatif terhadap Kemampuan Berpikir Kritis. *Jurnal Penelitian Dan Evaluasi Pendidikan Indonesia*, *13*(2), 168–178.

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.

Supriyanto, Fatirul, A. N., & Walujo, D. A. (2022). Pengaruh Strategi Problem Based Learning dan Motivasi Berprestasi terhadap Keterampilan Berpikir Kritis. *Jurnal Kumparan Fisika*, *5*(1), 43–54. https://doi.org/10.33369/jkf.5.1.43-54

Suryaman, M. (2020). Orientasi Pengembangan Kurikulum Merdeka Belajar. *Prosiding Seminar Daring Nasional: Pengembangan Kurikulum Merdeka Belajar*, 13–28. https://ejournal.unib.ac.id/index.php/semiba/issue/view/956/Tersediadi:https://ejou

rnal.unib.ac.id/index.php/semiba/issue/view/956/

Sutikno, M. S. (2021). *Strategi Pembelajaran* (Indramayu). Penerbit Adab.

Vhalery, R., Setyastanto, A. M., & Leksono, A. W. (2022). Kurikulum Merdeka Belajar Kampus Merdeka: Sebuah Kajian Literatur. *Research and Development Journal of Education*, *8*(1), 185–201. https://doi.org/10.30998/rdje.v8i1.11718

Winarti, N., Maula, L. H., Amalia, A. R., Pratiwi, N. L. A., & Nandang. (2022). Penerapan Model Pembelajaran Project Based Learning untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Kelas III Sekolah Dasar. *Jurnal Cakrawala Pendas*, *8*(3), 552–563. https://doi.org/10.31949/jcp.v8i2.2419