



Deep Learning: A Greeting and Question Model to Improve Students' Communication and Critical Thinking Skills

Pembelajaran Mendalam: Model Berkirim Salam dan Soal Untuk Meningkatkan Keterampilan Komunikasi dan Berpikir Kritis Mahasiswa

Zaenul Slam^{1*)}, Agung Sultoni²⁾, Shopia Amalia³⁾, Wai Mar Phyoo⁴⁾

1) Universitas Islam Negeri Syarif Hidayatullah Jakarta, Indonesia

2) Universitas Negeri Semarang, Indonesia

3) Universitas Terbuka, Indonesia

4) Universitas Yangon, Myanmar

Abstract

This study aims to determine the application of in-depth learning using the greeting and question-based model in Pancasila Education to improve students' communication and critical thinking skills. This study uses a qualitative approach to explore the model's application and a case study method to obtain in-depth information through its application. The study participants were lecturers and students of the Elementary Madrasah Teacher Education Study Program, Syarif Hidayatullah State Islamic University (UIN Syarif Hidayatullah), for the 2025-2026 Academic Year. Data collection techniques include observation, interviews, and documentation. The research findings indicate that the application of deep learning to the greeting and question model can improve students' communication and critical thinking skills. Improved communication skills in this model are evident in their ability to convey ideas, explain concepts, and interact verbally and in writing with group members. This includes the ability to ask and answer questions verbally, formulate written questions and answers, actively listen, and provide relevant responses. Furthermore, improvements in critical thinking skills are evident in students' increased active participation in discussions, their ability to formulate well-written questions, and their ability to provide comprehensive answers to questions. In conclusion, the application of this model can improve students' communication and critical thinking skills in PE. This research provides implications for strategies for conscious, meaningful, and enjoyable PE learning, noting significant differences compared to previous research that has not emphasized improving students' communication and critical thinking skills.

Keywords: Deep Learning, Greeting and Question, Pancasila Education, Communication Skills, Critical Thinking Skills

Abstrak

Penelitian ini bertujuan untuk mengetahui penerapan pembelajaran mendalam model berkirim salam dan soal dalam Pendidikan Pancasila (PP) dalam meningkatkan keterampilan komunikasi dan berpikir kritis mahasiswa. Penelitian ini menggunakan pendekatan kualitatif untuk mengeksplorasi penerapan model tersebut dan metode studi kasus untuk memperoleh informasi mendalam melalui penerapan model tersebut. Partisipan penelitian yaitu dosen dan mahasiswa Program Studi Pendidikan Guru Madrasah Ibtidaiyah Universitas Islam Negeri Syarif Tahun Akademik 2025-2026. Teknik pengumpulan data, yaitu observasi, wawancara, dan dokumentasi. Hasil penelitian, penerapan pembelajaran mendalam model berkirim salam dan soal dapat meningkatkan keterampilan komunikasi dan berpikir kritis mahasiswa. Peningkatan keterampilan komunikasi mahasiswa dalam model ini terlihat dari kemampuan mahasiswa menyampaikan ide, menjelaskan konsep, dan berinteraksi secara verbal dan tertulis dengan teman sekelompok, meliputi kemampuan bertanya dan menjawab secara lisan, menyusun pertanyaan dan jawaban tertulis, mendengarkan secara aktif, dan memberikan tanggapan yang relevan. Sedangkan peningkatan keterampilan berpikir kritis dalam model ini terlihat dari peningkatan partisipasi aktif mereka dalam diskusi, kemampuan menyusun soal yang baik, dan kemampuan memberikan jawaban yang komprehensif terhadap soal. Simpulan, penerapan model ini dapat meningkatkan keterampilan komunikasi dan berpikir kritis mahasiswa dalam PP. Penelitian ini memberikan implikasi pada strategi pembelajaran PP yang berkesadaran, bermakna, dan menggembirakan, mencermati perbedaan yang signifikan dibandingkan dengan penelitian sebelumnya yang belum menekankan pada peningkatan keterampilan komunikasi dan berpikir kritis mahasiswa.

Kata Kunci: Pembelajaran Mendalam, Berkirim Salam dan Soal, Pendidikan Pancasila, Keterampilan Komunikasi, Berpikir Kritis.

Received (28 Oct). Revised (1 Nov). Accepted (02 Dec)

How to Cite: Slam, Z., Sultoni, A., Amalia, S., & Phyo, W. M. (2025). Deep Learning: A Greeting and Question Model to Improve Students' Communication and Critical Thinking Skills. ***JEER: Journal of Elementary Educational Research***, 5(2): 216-230.

*Corresponding author:

E-mail: zaenul_slam@uinjkt.ac.id

INTRODUCTION

The future challenge for 21st-century education, including education in Indonesia, is to prepare the younger generation to be capable of facing an increasingly complex, dynamic, uncertain, and ambiguous environment, which is also driven by advances in science and technology. At the same time, an increasingly diverse society makes it vulnerable to conflict (Sukmayadi & Yahya, 2020). Strategies to overcome these challenges require adaptive curriculum changes. The curriculum needs to be designed to be flexible and relevant to the needs of the times, one of which includes the development of 21st-century skills (Rambe & Nasution, 2025; Thoyib, 2025).

The 4C skills (Communication, Collaboration, Creativity, and Critical Thinking), which are the four essential competencies of the 21st century, demonstrate the need to integrate these skills into education to create a generation that is adaptive, innovative, and capable of facing future challenges (Herlinawati et al., 2024). To achieve a decent life now and in the future, every child of the nation needs to have self-awareness in thinking (metacognitive abilities), the ability to ask and analyze (critical reasoning), the enthusiasm to produce new things (creative ethos), and the ability to communicate and collaborate effectively (Greenstein, 2012). Every child should receive an education that focuses on developing these skills, which are communication, collaboration, critical thinking, and creativity, in order to face the challenges of the 21st century and achieve success in the future (Binkley et al., 2012). Communication and critical thinking skills are the most important competencies for 21st-century global citizens (Chung, 2014). Communication skills are a person's competence to understand information and exchange ideas, feelings, and thoughts with others through the effective use of language or symbols (Slam, 2019). Meanwhile, critical thinking skills are an intellectual process for finding, analyzing, synthesizing, and evaluating information obtained from experience, observation, or communication, which is then used as a basis for making logical judgments and taking responsible actions (Wayudi et al., 2020). Critical thinking is the

ability to think in order to solve problems by making decisions from various information (Kusumawati & Setianto, 2024).

The importance of student communication skills is that they can improve social interaction, active participation, understanding of material, motivation, and character traits such as empathy and respect among students and lecturers (Pelle et al., 2024). Effective communication skills are essential for students, enabling them to achieve success in both academic and everyday life (Safitri et al., 2022; Slam, 2019). Actively engaging students in thinking and problem-solving is highly needed because it increases engagement, improves memory retention, and builds critical thinking and problem-solving skills essential for academic and life success (Melani, 2025). Critical thinking skills are essential skills that must be taught to students because they are very important for everyday life, work, and contribution in a complex society (Ngatminiati et al., 2024). Critical thinking enables individuals to analyze situations, evaluate information and evidence, weigh various arguments, and ultimately make informed and rational decisions, all of which are crucial for navigating and resolving complex challenges in various aspects of life (Rahardhian, 2022).

In relation to the above, Pancasila Education (Pendidikan Pancasila) is crucial for its ability to shape students into good citizens by equipping them with communication and critical thinking skills, thus preparing them to contribute positively to society (Sutanto et al., 2024). Pancasila Education is crucial because it aims to equip students with citizenship skills, such as communication and critical thinking. Through Pancasila Education, students are expected to develop good character, intelligence, and responsibility as citizens, enabling them to actively participate in society and national development (Slam, 2024). Pancasila Education as an instrument of Indonesian national education, is crucial for paying serious attention to developing communicative and critical reasoning skills (Slam, 2021).

Pancasila Education should develop students' communication and critical thinking skills. However, the majority of graduates experience communication barriers due to a lack of communication skills, self-confidence, and experience, leading to feelings of inferiority and low self-image, and making them hesitant to initiate conversations for fear of making mistakes (Hapsari et al., 2024). Furthermore, students' critical thinking skills are low (Anisa et al., 2021). Students' critical thinking skills in problem-solving are

uneven throughout the student population, with 30% having high thinking skills, 60% having moderate thinking skills, and 10% having low thinking skills (Saila, 2022).

The factors that contribute to students' low communication and critical thinking skills, according to the findings of a study by Winataputera & Budimansyah, (2007), are weaknesses in the quality of the Pancasila Education learning process and outcomes in higher education, where learning focuses more on civic knowledge and pays less attention to developing students' civic skills and character. Furthermore, lecturers' tendency to predominantly use lecture methods, with only occasional question-and-answer interactions and discussions, can reduce student active engagement, limit in-depth understanding, and create less engaging learning (Slam, 2024). With this type of learning method, the lecturer acts as the information provider and the students as the recipients, who are expected to memorize the material without much activity or active involvement (Lie, 2007). This teaching method only focuses on the transfer of knowledge from lecturer to student, thus hindering the development of students' communicative and critical reasoning skills because students are only passive recipients of information, not active participants in the learning process (Harefa & Harefa, 2025).

The traditional lecture-based learning method of "sit, listen, and take notes" makes students passive, hindering their communication, collaboration, creativity, and critical thinking skills. Therefore, it needs to be replaced with more interactive and participatory methods to create effective learning (Slam, 2024). Good communication skills can facilitate student understanding of the lesson, while poor communication skills can hinder understanding of the material taught by the lecturer (Kristianti, 2018). Students' critical thinking ethos is still weak in Indonesia, which is characterized by their low ability to analyze, evaluate, and solve problems (Rupidara, 2018). The negative impact of low critical thinking skills in learning is the small opportunity to develop new knowledge, understand the meaning of the material, achieve changes in perspective, and significantly increase learning competencies (Slam, 2024).

The deep learning approach is effective in Pancasila Education to improve students' communication and critical thinking (Slam & Nugroho, 2025). Deep learning is designed to develop higher-order thinking skills, apply knowledge to real-world contexts, and create a conscious, meaningful, and enjoyable learning process (Kementerian Pendidikan Dasar dan Menengah Republik Indonesia, 2025).

Implementing a deep learning approach requires an effective learning model. The greeting and question-based model has a strong relationship when integrated with immersive learning because it encourages improved communication and critical thinking skills through active student interaction and in-depth information processing (Tiasti et al., 2021). The greeting and question model is a form of cooperative learning designed to improve learning outcomes, comprehension skills, and student activity, including the development of communication and critical thinking skills (Arianti & Pramudita, 2022). In this model, students in study groups greet each other and ask questions to solve problems, thus encouraging discussion and collaboration among them (Lie, 2007). The learning of greetings and questions encourages students to ask questions related to the material provided, then these questions are sent to other groups accompanied by greetings (Mariyanti, 2019).

The greeting and question learning had an impact on student learning outcomes (Agusningtiah & Nugraheni, 2023). Application of greeting and question learning could improve student activity and learning outcomes (Setiawati, 2016; Anwar & Haris, 2009).

This research, which is focused on developing students' communication and critical thinking skills, has novelty value because it uses a model of greetings and questions as a learning innovation that integrates deep learning as a new approach to learning. This study aims to determine the application of deep learning using the greeting and question-based model in Pancasila Education to improve students' communication and critical thinking skills.

METHOD

Research Approach and Methods

This study uses a qualitative approach to explore in depth learning of greeting and question models and a case study method to obtain in depth information from the application of the learning model. The qualitative approach is an investigative process to understand the meanings individuals or groups derive from a social or humanitarian issue (Creswell, 2014). The case study method is an empirical research method that aims to examine a contemporary phenomenon or case in depth within a real-life context, often answering questions about how an event occurred or why it occurred (Yin, 2019).

Research Location and Subject

The research was conducted in the Elementary Madrasah Teacher Education (PGMI) study program, Faculty of Islamic Education and Teacher Training (Fakultas

Tarbiyah dan Ilmu Keguruan), Syarif Hidayatullah State Islamic University (UIN Syarif Hidayatullah), Jakarta, in the 2025/2026 Academic Year. The research subjects are: (1) Pancasila Education lecturers as the main informants for learning strategies; (2) 35 class 1 A students, consisting of 7 males and 28 females as participants in Pancasila Education Learning. The subjects practiced in-depth learning using the greeting and question model with the following learning syntax: (1) Forming small heterogeneous groups consisting of 4-5 students; (2) Each group makes greetings and questions and answers related to the lesson material; (3) Each group exchanges questions and answers with other groups; (4) Discussing and answering questions from other groups; and (5) Each group matches answers with other groups to verify their accuracy (Lee, 2007).

Data Collection Techniques

Data was collected using triangulation to test the credibility of the data by cross-checking the data with the same source using different techniques (Sugiyono, 2020). In this study, data were obtained through observation, interviews, and documentation. Observations were conducted during the in-depth learning process of the greeting and question model in PE to improve their communication and critical thinking skills. Interviews were conducted with five students who participated in the in-depth learning process of the greeting and question model in PE to improve their communication and critical thinking skills. Documents such as semester learning plans, student questions and answers, and other documents were also collected.

Data Analysis Technique

The data analysis which was using an interactive model, such as the Miles, Huberman, and Saldana(2014) consists of three main interrelated components: data reduction, data presentation, and drawing conclusions/verification. This process is continuous, with data being selected and simplified (reduced), presented in narrative form, tables, or diagrams to identify patterns, and then conclusions drawn and verified. This can then be revisited to previous stages for refinement.

RESULT AND DISCUSSION

The implementation of deep learning-based greeting and question based model in Pancasila Education can improve students' communication and critical thinking skills. This model creates conscious, meaningful, and enjoyable learning, contributing to the improvement of students' communication and critical thinking skills.

Enhancing Active and Conscious Learning Through a Greeting and Question-Based Learning Model

The implementation of the greeting and question based model can foster active, conscious, meaningful, and enjoyable learning for students. This model encourages active conscious learning: training metacognition, encouraging full involvement, working in groups to exchange questions and answers, developing independence, and strengthening conceptual understanding.

Specifically, student behavior in deep learning of the greeting and question model in Pancasila Education is ethical communication behavior (greetings) and knowledge-sharing behavior.

The results of an interview with HH in deep learning of the greeting and question-taking model in Pancasila Education I was motivated to learn actively and consciously by joining groups, listening to material presentations, making questions, preparing greetings, exchanging questions, working, discussing and correcting each other. SE stated, in deep learning model of greetings and questions, each group created questions and answers based on the material that has been studied, creating "greetings" for their group. Then they exchange questions. Next, each group answered the questions. After completion, we presented the answers and provided corrections. MNF said, each group prepared questions and answers. Then, we greeted and questioned other groups. This model encouraged us to actively create, analyze, and solve problems. It encouraged us to interact, think critically, and build understanding. Furthermore, CN stated that this model encouraged active interaction between students to practice knowledge and skills. SDH stated that this model not only fostered understanding of information but also encouraged mental and physical engagement, openness to new experiences, and more flexible thinking. Thus, learning using the greeting and question model has been proven to increase students' awareness of active learning.

This model allows students to actively participate in learning, help each other, and achieve deeper understanding, thereby improving learning outcomes and fostering cooperation and social skills (Aisyah & Rahayu, 2021). Furthermore, Setiawati (2016) stated that the greeting and question-asking learning model has proven effective in increasing student engagement. This model encourages students to actively participate, both in the question-making process, discussions, and learning reflections. Setiaji (2013) stated that the greeting and question-asking learning model encourages students to be

active in class by asking and answering questions, thus encouraging them to listen more attentively to the teacher's explanations. Cooperative learning using greetings and question-and-answer techniques makes students more active and motivated, leading to better learning outcomes (Islaihah, 2024).

The greeting and question-based learning model provides conscious, meaningful, and enjoyable learning. Through interaction, questions and answers, and self-evaluation, students not only learn the material but also develop awareness of their own learning process, making them more independent and active learners.

Enhancing Meaningful Learning Through a Greeting and Question-Based Model

The implementation of the greeting and question learning model can create meaningful learning for students. Observations show that this model can activate student collaboration in small groups to exchange questions and answers.

The results of interviews with several students, one of them being HH revealed; this model encouraged me to learn actively and think more deeply when solving problems and discussing with others. SE stated, this model created meaningful learning because it involves students in small groups exchanging questions and answers, thus encouraging interaction, in-depth understanding, and activation of existing knowledge. MNF described this model as providing meaningful learning that strives to make the subject matter more relevant, meaningful, and engaging. CN explained that this model creates a relevant, immersive, and authentic learning experience. Furthermore, SDH revealed that this model provides meaningful learning because it allows us to connect new knowledge with existing concepts.

This is confirmed by several research findings that the model of greeting and question provides interesting learning and improves learning outcomes (Setiawati, 2016). This model improves students' knowledge and skills by making them more active learners and motivated to answer questions posed by their peers (Huda, 2019), provides students with opportunities to practice their knowledge and skills (Lie, 2007), and trains students to create their own questions based on the material they have learned (Sugiyanto, 2011).

Fostering Active, Enjoyable, and Exciting Learning Through a Greeting and Question-Based Model

Implementing the greeting and question model can create enjoyable learning for students with how it encourages interaction, creativity, and collaboration in a relaxed and

competitive atmosphere. This model: (1) encourages interaction and collaboration. Students work in groups to generate questions and exchange them with other groups. This interaction breaks up the monotony of learning by not only focusing on the material, but also involving each group in creating a "greeting." This creative aspect makes the interaction more lively; (2) Encourages active engagement. Students play an active role in designing questions and finding answers. This role fosters a sense of ownership in their learning process. The process of creating their own questions encourages students to delve deeper into the process of developing good questions. This motivation stems from a desire to participate and foster a sense of ownership in their learning process. The process of creating their own questions encourages students to delve deeper into the process of developing good questions; (3) Develops higher-order thinking skills. When generating questions, students analyze material and synthesize it into a question. This trains their critical thinking skills. When receiving questions from other groups, they must work together to solve the problem, which fosters collaborative problem-solving skills.; and (4) Creates a fun atmosphere. This model features game-like aspects, such as exchanging greetings and questions. This reduces academic pressure and makes learning enjoyable. This model also offers a variety of activities to prevent students from getting bored quickly. Students alternate roles between asking questions and answering them.

The interview with HH revealed that the deep learning model of exchanging greetings and questions encourages interaction and collaboration: I work in small groups to create questions and exchange them with other groups. This interaction breaks up the monotony of learning. This activity not only focuses on the material but also involves each group in creating greetings. This creative aspect makes the interaction more lively and less rigid. The interview with another student named SE revealed that this model encourages active engagement: I am not just a passive recipient of information, but play an active role in designing questions and finding answers. This role fosters a sense of ownership in the learning process. The process of creating my own questions encourages me to delve deeper into developing good questions. This motivation stems from a desire to participate. Another student, MNF, described this model as incorporating elements of play and competition, such as exchanging greetings and questions. This element reduces academic pressure and makes learning enjoyable.

This model can prevent students from getting bored quickly. The interview with CN revealed that the implementation of this model involves cheering or unique ways of presenting questions, thus adding an element of play and fun to the learning process. The student, SDH, also stated that this model makes learning enjoyable because it focuses on student interaction, collaboration, and independence.

This is confirmed by several research findings that this model makes it mandatory for each group to create cheers as a greeting and as a symbol of their group identity to be attractive (Mariyanti, 2019), creates a fun learning atmosphere (Aisyah & Rahayu; 2021), makes a significant contribution to fostering cohesiveness when working in groups (Yogi et al., 2022).

Developing Students' Communication and Critical Thinking Skills Through Deep Learning Using a Greeting and Question-Based Model

The implementation of deep learning using the greeting and question model has a direct impact on improving learning activities, including communication skills, as well as a secondary impact on improving students' critical thinking skills. The direct impact of implementing this model is increasing student engagement, developing communication skills, creating an interactive learning environment and strengthening understanding of the material.

The results of interviews with several students such as HH showed that by application of this model, my communication skills improved directly and gradually through active interaction and collaboration within the group. SE stated this model directly trained communication skills: I interacted and collaborated in groups to develop questions and answer questions from other groups. I learned to work together, divide tasks, and agree on the results of the discussion. When submitting questions and presenting answers, I learned to articulate other students' ideas clearly. Furthermore, the answer evaluation process trained me to give and receive constructive feedback, which is an important part of communication. MNF revealed that the implementation of this model encouraged me to communicate actively, listen, and even express my opinions logically and politely. CN also stated that this model helped me gain confidence in speaking, expressing my opinions, and practicing my listening and responding skills. SDH stated that using this model was very helpful because it made it easier to express my opinions and arguments, allowing us to solve a problem through discussion and exchanging ideas. Anggresta and Vhalery (2021) stated, this model had a significant

impact on improving students' communication skills. This model encourages verbal interaction, collaboration, and the ability to explain concepts, all key components of effective communication. The same thing, Jauhar et al. (2024) said this model is effective in improving students' communication skills.

Beside that, this model can improve critical thinking skills. The development of critical thinking skills as a result of implementing this model of deep learning: encourages analysis and synthesis of information, practicing evaluation and reflection, and facilitates creative thinking. The results of an interview with a student named HH, the application of deep learning using the greeting and question model in Pancasila Education fosters deep understanding: I understand the material so I can formulate good questions and answer questions posed by other groups correctly. The student named SE also stated that the deep learning process using the greeting and question model can improve analytical skills. When creating questions, I need to analyze information from learning sources and when answering, I must interpret and evaluate the information to arrive at the correct answer. The results of an interview with a student named MNF: the application of deep learning using the greeting and question model can improve reasoning and problem-solving skills. CN stated this model encourages discussion and evaluation. SDH also revealed that this model can improve critical thinking skills. This model gives us hands-on experience formulating problems, analyzing information, and evaluating arguments, which are core components of critical thinking skills.

This is confirmed by Anggresta and Vhalery (2021), the greeting and question model encompasses five key points: (1) the initial step of sending greetings effectively builds student learning motivation; (2) shifting student activity from passive to active; (3) fostering good teamwork within groups; (4) improving student analytical skills; and (5) allowing students with poor communication skills to develop these skills gradually.

Setiawati (2016) stated that through this model, students have the opportunity to practice the knowledge and skills they have learned, as well as build cognitive structures and increase motivation for critical thinking. Jauhar et al. (2024) found that the greeting and question model builds cognitive structures through group interactions and motivates students to think critically by exchanging questions and answers.

CONCLUSION

The implementation of a greeting and question-based deep learning model has proven to be an effective approach for enhancing students' communication and critical

thinking skills. Improvements in communication are reflected in students' ability to express ideas both orally and in writing, formulate relevant questions, and provide appropriate responses, thereby strengthening their speaking skills and capacity to articulate ideas clearly. Meanwhile, the development of critical thinking skills is evident in students' ability to analyze information, construct meaningful questions, and evaluate responses—core elements of critical thinking. Through this process, students are trained to engage in problem-solving and to think more deeply about the learning material. Furthermore, this study offers important implications for the implementation of conscious, meaningful, and enjoyable learning strategies in Pancasila Education, demonstrating clear distinctions from previous studies that have not explicitly emphasized the development of students' communication and critical thinking skills.

REFERENCES

- Agusningtiah, D. K., & Nugraheni, L. (2023). Pengaruh Model Pembelajaran Kooperatif Teknik Berkirim Salam dan Soal Terhadap Hasil Belajar Siswa dalam Pembelajaran Matematika. *Jurnal Edukasi Matematika*, 3(2), 45–49. <https://doi.org/10.51836/jedma.v3i2.473>
- Aisyah, I. S., & Rahayu, G. D. S. (2021). Hasil Belajar Siswa Kelas IV Sekolah Dasar Melalui Model Pembelajaran Kooperatif Teknik Berkirim Salam Soal. *Journal of Elementary Education*, 4(2), 291–297. <https://doi.org/10.22460/collase.v4i2.5258>
- Anggresta, V., & Vhalery, R. (2021). Perbedaan Keterampilan Komunikasi Melalui Model Pembelajaran Kooperatif Tipe Pair Check Dengan Berkirim Salam Dan Soal. *Jurnal Inovasi Pendidikan Ekonomi (JIPE)*, 11(2), 199–210. <https://doi.org/10.24036/011132430>
- Anisa, A. R., Ipungkarti, A. A., & Saffanah, K. N. (2021). Pengaruh Kurangnya Literasi serta Kemampuan dalam Berpikir Kritis yang Masih Rendah dalam Pendidikan di Indonesia. *Conference Series Journal*, 1(1), 1–12. <https://ejournal.upi.edu/index.php/crecs/article/view/32685>
- Anwar, Y. A. S., & Haris, M. (2009). Pembelajaran Kooperatif Berkirim Salam dan Soal Untuk Meningkatkan Aktivitas dan Hasil Belajar Mahasiswa Pendidikan Matematika FKIP UNRAM Pada Mata Kuliah Dasar. *Jurnal Pijar MIPA*, 6(1), 5–8. <https://doi.org/10.29303/jpm.v6i1.118>
- Arianti, N., & Pramudita, D. A. (2022). Implementasi Pembelajaran Abad 21 Melalui Kerangka Community of Inquiry dengan Model Think Pair Share. *Jurnal Visi Ilmu Pendidikan*, 14(1), 65–73. <http://dx.doi.org/10.26418/jvip.v14i1.50290>
- Binkley, M. (2012). *Defining Twenty-First Century Skill*. London: Springer.
- Chung, Y. (t.t.). Enhancing Students' Communication Skills in The Science Classroom Through Socioscientific Issues. *International Journal of Science and Mathematics Education*, 1(27), 1–27. <https://doi.org/10.1007/s10763-014-9557-6>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publication.
- Greenstein, L. M. (t.t.). *Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning*. Corwin Press.

- Hapsari, R. N., Agustina, S. M., Wijaya, R., & Romadona, M. R. (2024). Kurangnya Keterampilan Komunikasi Generasi Z Memasuki Pasar Kerja. *Jurnal_Pekommas*, 9(1), 55–66. <https://doi.org/10.56873/jpkm.v9i1.5241>
- Harefa, & Harefa. (2025). Hubungan Antara Metode Pengajaran Dosen dan Perkembangan Kompetensi Mahasiswa. *Identik: Jurnal Ilmu Ekonomi, Pendidikan dan Teknik*, 2(1), 45–50. <https://doi.org/10.70134/identik.v2i1.166>
- Herlinawati, Marwa, Ismail, N., Junaidi, Liza, L. O., & Situmorang, D. D. B. (2024). The integration of 21st century skills in the curriculum of education. *Heliyon*, 10(15), 1–11. <https://doi.org/10.1016/j.heliyon.2024.e35148>
- Huda, M. (2019). *Cooperative Learning*. Yogyakarta. Yogyakarta: Pustaka Belajar.
- Islaihah, M. (2024). Application of Cooperative Learning Methods through Sending Speeches and Questions to Improve Chemistry Learning. *Journal of Chemical Learning Innovation*, 1(1), 14–19. <https://doi.org/10.37251/jocli.v1i1.1028>
- Jauhar, S., Firdaus, & Hamrullah, C. (2024). Efektivitas Model Pembelajaran Kooperatif Tipe Berkirim Salam Dan Soal Terhadap hasil Belajar IPS (Studi Pada Kelas IV SD INPRES 5/81 Leoape Kecamatan Palaka Kabupaten Bone. *Global Science Education Journal*, 6(1), 81–90. <https://doi.org/10.26858/ges.v6i1.1766>
- Kementerian Pendidikan Dasar dan Menengah Republik Indonesia. (2025). *Pembelajaran Mendalam Menuju Pendidikan Bermutu Untuk Semua*. Kementerian Pendidikan Dasar dan Menengah Republik Indonesia.
- Kristianti, H. S. (2018). Peningkatan Kecakapan Berkomunikasi dan Hasil Belajar PKn Siswa Kelas 6 dengan Talking Stick Berbantuan Salindia. *Jurnal Pendidikan dan Kebudayaan*, 8(3), 293–301. <https://doi.org/10.24246/j.js.2018.v8.i3.p293-301>
- Kusumawati, U. D., & Setianto, Y. P. (2024). Improving Data Literacy Among Journalists Through Workshop and Conference to Advance The Analytical Skills in Reporting. *Jurnal Sinergitas PkM dan CSR*, 8(2), 1–17. <http://dx.doi.org/10.19166/jspc.v8i1.7962>
- Lie, A. (2007). *Cooperative Learning*. Jakarta : PT Gramedia.
- Mariyanti, S. (2019). Penerapan Model Pembelajaran Berkirim Salam dan Soal untuk Meningkatkan Pemahaman Matematika Materi Barisan Bilangan Siswa Kelas IX D SMPN 3 Kediri. *Jurnal Penelitian Inovasi Pembelajaran*, 5(1), 21–31. <https://doi.org/10.29407/pn.v5i1.12866>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Analysis Data: A Methods Sorce Book*. SAGE Publications.
- Ngatminiati, Y., Hidayah, Y., & Suhono. (2024). Keterampilan Berpikir Kritis untuk Mengembangkan Kompetensi Abad 21 Siswa Sekolah Dasar. *Jurnal Review Pendidikan Dan Pengajaran*, 7(3), 8210-8216. <https://doi.org/10.31004/jrpp.v7i3.30193>
- Pelle, Y. Y., Ali, U., & Weny, N. A. (2024). Pengaruh Kemampuan Berpikir Kritis dan Keterampilan Komunikasi Bagi Siswa dalam Menjawab Soal Higher Order Thinking Skills (HOTS) di Sekolah Menengah Teologi Kristen Rote Timur. *Apostolos: Journal Of Theology and Christian Education*, 4(2), 101-108. <https://doi.org/10.52960/a.v4i2.327>
- Rahardhian, A. (2022). Kajian Kemampuan Berpikir Kritis (Critical Thinking Skill) dari Sudut Pandang Filsafat. *Jurnal Filsafat Indonesia*, 5(2), 87–94. <https://doi.org/10.23887/jfi.v5i2.42092>

- Rambe, K. B., & Nasution, S. (2025). The Influence of the Cooperative Learning Model of the Team Game Tournament (TGT) Type on Students' Collaborative Learning Abilities in the Indonesian Language Subject of Elementary School. *Journal of Elementary Educational Research*, 5(1), 135–150. <https://doi.org/10.30984/jeer.v5i1.1398>
- Melani, E.R. Triwoelandari, R. & Imamah, A.I., (2025). The Use of Project-Based Science Learning Model to Improve Critical Thinking Skills of Elementary School Students. *JEER: Journal of Elementary Educational Research*, 5(1), 34-49. <https://doi.org/10.30984/jeer.v5i1.1379>
- Safitri, E. M., Maulidina, I. F., Zuniari, N. I., & Amaliyah, T. (2022). Keterampilan Komunikasi Siswa Sekolah Dasar (SD) di Alam dalam Pembelajaran Berbasis Laboratorium tentang Biopori. *Jurnal Basicedu*, 6(2), 1–10. <https://doi.org/10.31004/basicedu.v6i2.2472>
- Saila, N. (2022). Analisis Kemampuan Berfikir Tingkat Tinggi (HOTS) Mahasiswa Fakultas Keguruan dan Ilmu Pendidikan Dala Menyelesaikan Masalah Statistik. *Jurnal Pendidikan Dan Konseling*, 4(2), 288–293. <https://doi.org/10.59024/simpati.v1i1.82>
- Setiaji, R. S. (2013). Pengaruh Model Pembelajaran Kooperatif Tipe Giving Question and Getting Answer Terhadap Hasil Belajar Siswa Dan Keterampilan Sosial Siswa Pada Standar Kompetensi Memahami Dasar-dasar Elektronika Di SMK Negeri 2 Surabaya. *Jurnal Penelitian Pendidikan Elektro*, 2(1), 137–144. <https://doi.org/10.26740/jpte.v2n1.p%25p>
- Setiawati, M. (2016). Model Pembelajaran Berkirin Salam Dan Soal Dengan Media Bus Untuk Meningkatkan Hasil Belajar IPS. *Metafora*, 2(2), 157–170. <https://doi.org/10.26740/metafora.v2n4.p157-170>
- Slam, Z. (2019). Penerapan Model Cooperative Learning Tipe Stad untuk Meningkatkan Kemampuan Komunikasi Peserta Didik. *Sosio Didaktika: Social Science Education Journal*, 6(2), 145-154. <https://doi.org/10.15408/sd.v6i2.14412>
- Slam, Z. (2021). *Pendidikan Kewarganegaraan Untuk Perguruan Tinggi*. Bandung: Alfabeta.
- Slam, Z. (2024a). Pengembangan Pendidikan Pancasila dan Kewarganegaraan Melalui Kepala Bernomor Terstruktur Sebagai Model Pendidikan Kecakapan Kewarganegaraan. *Jurnal Civic Hukum*, 9(1), 53–64. <https://doi.org/10.22219/jch.v9i1.28880>
- Slam, Z. (2024b). Pengembangan Pendidikan Pancasila dan Kewarganegaraan Melalui Kepala Bernomor Terstruktur Sebagai Model Pendidikan Kecakapan Kewarganegaraan. *Jurnal Civic Hukum*, 9(1), 53–64. <https://doi.org/DOI:%2520https://doi.org/10.22219/jch.v9i1.28880>
- Slam, Z., & Nugroho, M. N. (2025). Model Talking Stick Based Deep Learning untuk Pengembangan High Order Thinking Skills Mahasiswa. *Prosiding Seminar Nasional FITK UIN Syarif Hidayatullah Jakarta*, 2(1), 142-156. <https://doi.org/10.64277/semnas.v2i1.166>
- Sugiyanto. (2011). *Model-model Pembelajaran Inovatif*. Surakarta: Yuma Pressindo.
- Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Sukmayadi & Yahya. (2020). Indonesian Education Landscape and the 21st Century Challenges. *Journal of Social Studies Education Research*, 11(4), 219–234. <https://jsser.org/index.php/jsser/article/view/901>
- Sutanto, Z. A., Murdiono, M., & Hidayah, E. N. (2024). Strengthening Students'Communication Skills In Civic Education Learning Through The

- Application Of The Scratic Seminar Learning Model. *European Journal Of Social Sciences Studies*, 10(2), 129–146. <http://dx.doi.org/10.46827/ejsss.v10i2.1771>
- Thoyib, M. (2025). Tren Desain Kurikulum Adaptif di Era Disrupsi Sebagai Strategi Manajerial Menuju Pendidikan Masa Depan. *Jurnal Manajemen dan Pendidikan Agama Islam*, 3(4), 1–12. <https://doi.org/10.61132/jmpai.v3i4.1162>.
- Tiasti, L. A., Karoma, &, & Mardeli. (2021). Pengaruh Model Pembelajaran Kooperatif Learning Teknik Terhadap Keterampilan Peserta Didik di Pondok Pesantren Putri Azzahro Palembang. *Jurnal PAI Raden Fatah*, 3(1), 141–151. <https://doi.org/10.19109/pairf.v3i2.6541>
- Wayudi, W., Suwatno, & Santoso, B. (2020). Kajian Analisis Keterampilan Berpikir Kritis Siswa Sekolah Menengah Atas. Jurnal Pendidikan Manajemen Perkantoran. *Jurnal Pendidikan Manajemen Perkantora*, 5(1), 67-82. <https://doi.org/doi:%252010.17509/jpm.v4i2.18008>
- Winataputera, & Budimansyah. (2007). *Civic Education: Konteks, Landasan, Bahan Ajar, dan Kultur Kelas*. Bandung : Program Studi PKn PPs.
- Yin, R. K. (2019). *Studi Kasus: Desain dan Metode*. Jakarta: PT RajaGrafindo.
- Yogi, K. F., Utomo, D. P., & Zuhkrufurrohman. (2022). Effects of Cooperative Learning Model Send Greetings and Problems Type Activity and Results of Learning. *Mathematics Education Journal*, 6(2), 186–192. <https://doi.org/10.22219/mej.v6i2.17580>