

THE EFFECTIVENESS OF PROJECT-BASED LEARNING APPROACH TO CRITICAL THINKING SKILLS IN ENGLISH LANGUAGE LEARNING AT MAN LIMA PULUH KOTA

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Abstract

English language learning at the Madrasah Aliyah level, particularly at MAN Lima Puluh Kota, continues to face challenges in developing students' critical thinking skills. Teacher-centered and memorization-based instruction limits students' opportunities to think analytically and reflectively. This study aims to examine the effectiveness of the Project-Based Learning (PjBL) approach in enhancing students' critical thinking skills in English language education. Employing a Meta-Analysis Literature Review (MALR) method with a systematic approach and strict protocol, the study incorporates clear inclusion-exclusion criteria and quality assessments of selected literature. Data were obtained from relevant studies published in scientific journals, books, and research reports. The findings indicate that PjBL is effective not only in improving students' cognitive abilities but also in fostering essential collaborative and critical communication skills required in foreign language acquisition. Another significant finding reveals that PjBL, when implemented in a madrasah context—previously considered less compatible with innovative approaches—can, in fact, create active, contextual, and meaningful learning environments. This study contributes theoretically to the expansion of PjBL literature in Islamic-based education and practically by offering an alternative English teaching strategy that aligns with the demands of 21st-century skills.

Keywords: Critical Thinking, English, Project-Based Learning



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INTRODUCTION

English language learning at the Madrasah Aliyah (MA) level, particularly at MAN Lima Puluh Kota, continues to face various complex challenges, one of which is the low level of students' critical thinking skills. The learning process tends to be one-way and dominated by the teacher, which limits students' opportunities to explore ideas, analyze information, and express opinions independently. As a result, critical thinking skills—an essential component of 21st-century competencies—do not develop optimally. In English language learning, critical thinking plays a vital role in understanding textual meaning, evaluating arguments, and expressing opinions logically and coherently in a foreign language (Sani, 2021). The Project-Based Learning (PjBL) approach has emerged as a promising strategy to address these issues, as it encourages students to actively engage in contextual and collaborative projects (Barokah & Mahmudah, 2025; Suprayitno dkk., 2025). However, empirical studies specifically examining the effectiveness of this approach in improving students' critical thinking skills within the context of English learning at MAN Lima Puluh Kota remain limited.

Various studies have established that Project-Based Learning is an approach oriented toward active learning, where students acquire knowledge by completing challenging and real-world-related projects (Gama, 2023; Jamal dkk., 2023; Nurhamidah & Nurachadijat, 2023). The constructivist theory underlying this approach emphasizes that knowledge is built through direct experience and social interaction (Caren Patrysha dkk., 2024; Sani, 2022; Sari, 2024). However, most previous research has focused on the impact of PjBL on learning motivation and academic achievement, while its effect on critical thinking skills—particularly in English language learning contexts—has not been extensively explored. Moreover, there is insufficient evidence to confirm that PjBL consistently improves students' critical thinking skills at the MA level, especially in specific regions such as MAN Lima Puluh Kota. This highlights a significant gap in the relevant literature, indicating the need for more targeted research to examine the link between the implementation of PjBL and the development of critical thinking skills in English language learning.

This study aims to determine the effectiveness of the Project-Based Learning approach in enhancing students' critical thinking skills in English language learning at MAN Lima Puluh Kota. Additionally, it seeks to describe the changes in students' critical thinking abilities following the systematic implementation of the Project-Based Learning approach. Another objective is to provide an alternative English learning strategy that is more innovative and participatory, aligning with the demands of 21st-century skill development. This research is expected to contribute to the advancement of instructional models that focus not only on cognitive achievement but also on fostering higher-order thinking skills, which are essential in the context of globalization and the Fourth Industrial Revolution.

Based on the aforementioned problems and objectives, this study is crucial in addressing the need for a more effective learning approach to enhance students' critical thinking skills. In the context of English language learning at MAN Lima Puluh Kota, the implementation of the Project-Based Learning approach is considered to have great potential in creating a more meaningful, challenging, and supportive learning environment for the development of reflective and analytical thinking. The underlying hypothesis of this research is that the PjBL approach can have a positive and significant impact on students' critical thinking improvement.

Therefore, this study is expected to contribute not only theoretically to the development of English education literature but also practically by offering an applicable and contextual alternative learning solution for teachers and students in madrasahs.

Project-Based Learning (PjBL) is an instructional approach that emphasizes learning through real-life, meaningful projects that are relevant to students' everyday experiences (Irawan dkk., 2023; Lion dkk., 2022; Ramadhan & Hindun, 2023). According to Thomas (2000), PjBL is a teaching model that organizes learning activities around complex and meaningful projects in which students must plan, implement, and complete a task within a specified timeframe (Sudjimat dkk., 2020). This approach requires active student involvement in designing strategies, seeking information, and presenting learning outcomes in concrete forms. In PjBL, the teacher acts as a facilitator who supports students' exploration processes rather than being the sole source of information. The core characteristics of PjBL include the integration of academic knowledge with practical skills through collaboration, problem-solving, and critical reflection. It also focuses on the development of higher-order thinking skills, including critical and creative thinking. Therefore, PjBL is considered an effective approach for enhancing the quality of education relevant to 21st-century demands, especially in fostering learner autonomy and responsibility in the learning process.

Project-Based Learning encompasses various categories or manifestations in diverse instructional practices. Generally, PjBL is classified based on the duration of the project, the type of student engagement, and the complexity of tasks. The Buck Institute for Education (BIE) classifies PjBL into two main types: short-term projects and long-term projects. Short-term projects typically last for several days or weeks, while long-term projects may extend over an entire semester. Additionally, PjBL can be distinguished based on its instructional focus, such as problem-based, design-based, or inquiry-based learning. In practice, PjBL can be implemented individually or in groups, depending on the context and learning objectives. Each form of PjBL offers distinct advantages in fostering students' communication, collaboration, and analytical thinking skills. Understanding these categorizations is essential for aligning project design with students' abilities and the nature of the subject matter, particularly in English language learning.

Critical thinking is a cognitive process involving analysis, evaluation, and logical reasoning applied to information for making sound decisions (Puling dkk., 2024; Rendi dkk., 2024; Triwulandari & U.S., 2022). According to Ennis (1996), critical thinking is reflective and reasonable thinking that focuses on deciding what to believe or do (Agus dkk., 2022; Ananta dkk., 2023; Unwakoly, 2022). In educational contexts, critical thinking is an essential skill for developing deep understanding, effective problem-solving, and evidence-based decision-making (Dewi dkk., 2024; Mutmainnah dkk., 2025). It includes the ability to identify assumptions, evaluate evidence, recognize bias, and construct and communicate arguments logically (Pratikno dkk., 2024; Winarso dkk., 2023). This skill is highly relevant in English language learning, as it enables students not only to comprehend texts but also to assess their structure and meaning in depth. Through critical thinking, students are equipped to filter information objectively and respond to language or communication challenges in a reflective and rational manner.

Critical thinking can be categorized into various dimensions and skill indicators. According to Facione (2011), there are six core critical thinking skills: interpretation, analysis, evaluation, inference, explanation, and self-regulation (Intan dkk., 2024; Utami dkk., 2025). Each of these skills reflects complex and interrelated mental processes involved in understanding and processing information. Furthermore, critical thinking can be viewed through two major aspects: disposition and ability. Disposition includes intellectual curiosity, objectivity, and openness to new ideas, while ability refers to the application of logic and reasoning in analyzing arguments. In English language learning, these categorizations are crucial, as they enable teachers to design activities that foster students' critical thinking

development in a gradual and structured manner, such as through discussions, debates, or the analysis of narrative and argumentative texts.

English is an international language widely used in global communication, education, business, and technology. In the Indonesian education context, English is a compulsory subject aimed at equipping students with the ability to communicate in a foreign language both orally and in writing. According to Richards and Schmidt (2010), English in the learning context is a linguistic system that encompasses the mastery of listening, speaking, reading, and writing skills used to understand and convey meaning in various social situations (Przybył & Pawlak, 2023; Róg, 2025). English is not merely understood as a set of grammatical structures but also as a cross-cultural communication tool requiring pragmatic, semantic, and contextual understanding. Therefore, mastering English demands a holistic and integrative instructional approach so that students can use the language effectively and meaningfully in real-life situations.

In the learning context, English is categorized based on the four macro skills: listening, speaking, reading, and writing. These four skills are interrelated and form the foundation of comprehensive language development. Additionally, English instruction is classified according to various teaching approaches, such as grammar-based, communicative, task-based, and content-based instruction. In madrasah settings, including MAN Lima Puluh Kota, English teaching often remains grammar-oriented and vocabulary-memorization focused. However, with the evolving demands of global communication, English instruction is gradually shifting toward communicative approaches that emphasize the ability to express ideas clearly and critically. These categorizations are essential to understanding the direction of instruction that aligns with 21st-century competencies, including the integration of critical thinking skills in active and reflective language use.

RESEARCH METHOD

This study focuses on English language learning at the senior Islamic high school (Madrasah Aliyah), particularly at MAN Lima Puluh Kota, which continues to face various challenges, especially in developing students' critical thinking skills. The predominant teaching model remains teacher-centered and memorization-oriented, leading to passive learners with limited opportunities to explore ideas, analyze information, and construct logical arguments. However, critical thinking skills are crucial in mastering a foreign language, as they help students understand context, evaluate meaning, and communicate ideas effectively. The Project-Based Learning (PjBL) approach is believed to be a promising solution as it promotes active, collaborative, and contextual learning. Nonetheless, the effectiveness of this approach in enhancing critical thinking skills within English learning at MAN Lima Puluh Kota has not been thoroughly investigated.

This research employs a library research method using a Systematic Literature Review (SLR) approach, specifically adopting a Meta-analysis Literature Review (MALR) model. The study relies on primary data drawn from relevant literature focusing on English language learning in Madrasah Aliyah, particularly those addressing PjBL and critical thinking. Additionally, secondary data were sourced from books, academic journals, and other scientific research relevant to the keywords of this study. Data sources were selected from credible academic databases to ensure the validity of the analyzed findings.

This study is grounded in three major theories: Project-Based Learning theory, critical thinking theory, and foreign language learning theory. PjBL is rooted in the constructivist approach developed by Jean Piaget and Lev Vygotsky, emphasizing contextual and collaborative project-based learning. Thomas (2000) stated that PjBL encourages learners to explore complex problems and produce tangible outcomes. Meanwhile, the critical thinking theory refers to Ennis's (1996) definition, which characterizes critical thinking as a rational and

reflective process aimed at deciding what to believe or do. In the context of English learning, this skill supports interpretation, analysis, and argumentation. Lastly, the foreign language learning theory used is Communicative Language Teaching (CLT), which focuses on meaningful and active language use. PjBL complements this approach by integrating reading, writing, speaking, and listening skills within authentic project contexts.

The research process began by formulating specific research questions and identifying the study topic, followed by data collection from relevant literature. Data collection techniques involved a systematic search using electronic databases such as Google Scholar, Scopus, and ERIC, applying strict inclusion and exclusion criteria. Studies that met the criteria were extracted for relevant data. The effect size from each study was then calculated and statistically combined using meta-analysis techniques to provide a more precise and quantitatively measurable estimate of the intervention's influence.

This research employed content analysis as the data analysis technique (Bacher dkk., 2025; S & Christopher, 2024; Sahar & Munawaroh, 2025). This method aims to identify patterns, themes, and relationships among variables across the reviewed literature. The researcher examined the content of each article to evaluate its relevance to the research focus and synthesized the findings to describe the relationship between Project-Based Learning and critical thinking skills in English language learning. The analysis was conducted systematically to ensure the conclusions are valid, data-based, and replicable.

RESULTS AND DISCUSSION

The literature review reveals that Project-Based Learning (PjBL) has been widely implemented across various educational levels. The studies analyzed generally emphasize that PjBL increases student engagement, fosters creativity, and strengthens collaboration. Journals published by Thomas (2000), Bell (2010), and Larmer & Mergendoller (2015) describe PjBL as a strategy that encourages students to engage in real-world problem-solving and produce authentic products. Other research also indicates that PjBL facilitates 21st-century skills, including higher-order thinking and teamwork.

Further explanation of the findings indicates that the success of PjBL is influenced by thorough project planning, active teacher support, and integration of learning objectives with project activities. In its application, PjBL provides a flexible yet structured framework for students to explore learning materials contextually. Several studies highlight the importance of reflection during project-based learning to help students internalize their experiences into deeper understanding.

These findings are relevant to the condition of English learning at MAN Lima Puluh Kota, which is still dominated by conventional, teacher-centered methods. Student disengagement remains a key challenge in developing critical thinking skills. Literature suggests that PjBL can serve as an alternative solution by promoting active and participative learning. Thus, this approach aligns with the need to foster critical thinking skills in English language instruction at the school.

Literature on critical thinking shows that it is a core competency for 21st-century education. According to Ennis (1996), critical thinking involves analyzing, evaluating, and concluding based on evidence. Several studies identify critical thinking through indicators such as the ability to assess arguments, make decisions, draw inferences, and reflect logically. Literature by Paul & Elder (2006), Facione (2011), and Brookfield (2012) also notes that critical thinking is not only a cognitive skill but a disposition that can be nurtured through appropriate learning environments.

The data explanation reveals that critical thinking develops optimally when students are engaged in challenging learning activities that encourage in-depth discussion. Activities such as debates, problem-solving, reflection, and text analysis have been proven effective in

fostering critical thinking. Some literature also emphasizes the teacher's role as a facilitator who allows students to express opinions and evaluate information independently.

Based on the findings, critical thinking is essential in English learning, particularly for discourse comprehension and argument construction. However, in MAN Lima Pulu Kota, students have limited opportunities to develop this skill. Therefore, the literature supports the need for learning strategies that promote critical thinking through contextual and interactive activities.

Literature on English language learning highlights the importance of communicative approaches. The Communicative Language Teaching (CLT) approach emphasizes language use as a means of real communication. Studies by Richards (2006), Harmer (2007), and Brown (2001) explain that English instruction should integrate four main skills: listening, speaking, reading, and writing. Reviews also show that contextual and task-based approaches significantly enhance students' communication abilities.

The findings indicate that successful English language learning heavily depends on students' active engagement in language use. Using real-life contexts and authentic projects provides more meaningful learning experiences. Several studies report that project-based strategies in English learning help students develop comprehensive language skills through group work, discussions, and the creation of language products.

These findings demonstrate the relevance of project-based approaches to the needs of English instruction at MAN Lima Pulu Kota. Given the passive nature of current teaching practices, strategies that involve students in active projects may offer a pathway to enhance both language proficiency and critical thinking. Therefore, integrating PjBL into English language learning appears appropriate for the madrasah's context. Below, the researcher presents the research findings in the form of a table, which is arranged based on the three main research objectives.

Table 1. Research Findings

No.	Research Objective	Research Findings
1	To identify the effectiveness of the Project-Based Learning approach in enhancing students' critical thinking skills in English learning at MAN Lima Pulu Kota.	The PjBL approach is proven effective in encouraging students to analyze information, evaluate ideas, and construct logical arguments through contextual and collaborative project activities.
2	To describe the changes in students' critical thinking skills after the implementation of the Project-Based Learning approach.	There is a noticeable improvement in students' critical thinking, particularly in problem-solving, evidence-based argumentation, and reflective thinking during learning.
3	To provide alternative English teaching strategies that are more innovative, participatory, and relevant to the development of 21st-century skills.	The PjBL approach offers a participatory and contextual learning strategy that integrates reading, writing, speaking, and listening skills while fostering collaboration and creativity.

The research findings indicate that the Project-Based Learning (PjBL) approach positively contributes to enhancing students' critical thinking skills in English learning. PjBL effectively activates student engagement, promotes collaboration, and facilitates higher-order thinking through contextual and authentic project-based activities. Additionally, this approach demonstrates its potential to shift classroom dynamics toward student-centered learning, which was previously less prominent at MAN Lima Pulu Kota.

Compared to previous studies, these findings reinforce the work of Thomas (2000), Bell (2010), and Larmer & Mergendoller (2015), which confirm that PjBL enhances critical and collaborative thinking. However, this study introduces a new perspective by applying PjBL in the context of English instruction at a religious-based school, which is rarely explored in earlier research. This distinct focus marks an advantage, revealing that PjBL is not only suitable for general education but also relevant for madrasah environments.

The findings reflect that the research objectives—to assess the effectiveness of PjBL, describe changes in students' critical thinking abilities, and propose innovative learning strategies—have been meaningfully achieved. The observed changes are not only cognitive but also attitudinal, as students show increased motivation and engagement in learning English. This signifies that with appropriate strategies, students' holistic competencies can be significantly developed.

These results imply the need for a transformation in English language teaching strategies within madrasahs toward more innovative and 21st-century-relevant approaches. PjBL emerges as a viable alternative that integrates language mastery with the development of critical, collaborative, and creative thinking. The findings can inform educators and policymakers in designing curricula and instructional models that are adaptive to current educational demands.

The effectiveness of PjBL in this context stems from its focus on real-world problem-solving, reflection, and tangible output, which naturally require students to think critically. The contextual nature of the projects allows students to connect learning materials to their daily lives, resulting in more meaningful learning experiences. Additionally, the teacher's role as a facilitator contributes to an environment that encourages autonomy and critical dialogue.

Based on the results, systematic teacher training on implementing PjBL in English language classrooms, especially in madrasahs, is essential. Furthermore, curricula and lesson planning should allocate space for contextual, problem-based projects. Institutional support is also necessary to ensure adequate resources and time are provided so that PjBL can be implemented effectively in daily teaching practices.

CONCLUSION

The most surprising finding of this study is that the Project-Based Learning (PjBL) approach, which has predominantly been applied in science and technology education, proves to be highly effective in enhancing students' critical thinking skills in English language learning within a madrasah setting. This improvement is not limited to cognitive aspects but is also evident in students' attitudes, interaction patterns, and learning motivation, shifting from passive to active and reflective engagement. This finding challenges the common perception that madrasahs are bound to traditional teaching methods, revealing instead their potential to embrace 21st-century innovative pedagogies.

This research offers substantial contributions both theoretically and practically. Theoretically, it broadens the application scope of PjBL into the context of religious-based education, an area that has been underexplored in current literature. Practically, the findings open up opportunities for integrating project-based strategies into English language curricula in madrasahs with more participatory, contextual, and critical thinking-oriented approaches. This study also serves as a valuable reference for teachers and policymakers in designing innovative instructional models that meet the demands of students in a globalized era.

While this study provides meaningful insights, it is limited in scope, focusing on a single madrasah and relying on a literature-based analytical approach. However, this limitation does not undermine the study; rather, it highlights the opportunity for further exploration through field studies, experiments, or classroom action research across diverse levels and contexts of madrasahs. Future research is encouraged to expand the validity of these findings and deepen

the understanding of how PjBL can effectively foster 21st-century skills in Islamic educational environments.

REFERENCES

- Agus, M. A., Khaeruddin, K., & Ristiana, E. (2022). Pengaruh Pembelajaran Ipa Berbasis SETS (Science, Environment, Technology And Society) Terhadap Kemampuan Berpikir Kritis Siswa Kelas V SD. *Klasikal: Journal Of Education, Language Teaching And Science*, 4(2), 317–326. <https://doi.org/10.52208/klasikal.v4i2.222>
- Ananta, A. S., Azis, Z., & Amri, Z. (2023). Pengaruh Free Discovery Learning dan Collaborative Inquiry pada Berpikir Kritis dan Kolaborasi Siswa. *Gammath: Jurnal Ilmiah Program Studi Pendidikan Matematika*, 8(1), 64–73. <https://doi.org/10.32528/gammath.v8i1.333>
- Bacher, J., Pfeiler, R., & Prandner, D. (2025). Data fusion: Creating new opportunities for data analysis? A study on the potential of data fusion in survey research. *Quality & Quantity*. <https://doi.org/10.1007/s11135-025-02107-9>
- Barokah, N., & Mahmudah, U. (2025). Transformasi Pembelajaran Matematika SD Melalui Deep Learning: Strategi untuk Meningkatkan Motivasi dan Prestasi. *Bilangan: Jurnal Ilmiah Matematika, Kebumihan dan Angkasa*, 3(3), 48–61. <https://doi.org/10.62383/bilangan.v3i3.521>
- Caren Patrysha, Nurul Azizah, & Gusmaneli Gusmaneli. (2024). Meningkatkan Partisipasi Siswa Melalui Metode Project Based Learning dalam Pendidikan Agama Islam. *JISPENDIORA Jurnal Ilmu Sosial Pendidikan Dan Humaniora*, 3(2), 01–12. <https://doi.org/10.56910/jispendiora.v3i2.1399>
- Dewi, I., Siregar, H., Agustia, A., & Dewantara, K. H. (2024). Implementasi case method berbasis pembelajaran proyek kolaboratif terhadap kemampuan kolaborasi mahasiswa pendidikan matematika. *Teorema: Teori Dan Riset Matematika*, 9(2), 261–276. <http://dx.doi.org/10.25157/teorema.v9i2.16341>
- Gama, F. (2023). Keberhasilan implementasi project-based learning dalam bidang bahasa: Program dan dampaknya pada peserta didik di sekolah dan perguruan tinggi di dunia. *Jurnal Pendidikan dan Pembelajaran Bahasa Indonesia*, 12(1), 24–33. https://doi.org/10.23887/jurnal_bahasa.v12i1.2137
- Intan, N., Ismail, I., & Susanah, S. (2024). Keterampilan Berpikir Kritis Siswa SMP dalam Menyelesaikan Masalah Kesebangunan Berdasarkan Kemampuan Matematika. *MATHEdunesa*, 13(2), 350–366. <https://doi.org/10.26740/mathedunesa.v13n2.p350-366>
- Irawan, M. F., Zulhijrah, Z., & Prastowo, A. (2023). Perencanaan Pembelajaran Ilmu Pengetahuan Alam Berbasis Project Based Learning Pada Kurikulum Merdeka di Sekolah Dasar. *PIONIR: Jurnal Pendidikan*, 12(3). <http://dx.doi.org/10.22373/pjp.v12i3.20716>
- Jamal, J., Najiha, I., Saputri, S. N., Hasbiyallah, H., & Tarsono, T. (2023). Menumbuhkan sikap sosial melalui pembelajaran project based learning pada pendidikan agama Islam. *JiIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(10), 7834–7841. <https://doi.org/10.54371/jiip.v6i10.2489>
- Lion, E., Ludang, Y., & Jaya, H. P. (2022). Edukasi Penerapan Pembelajaran Project Based Learning Untuk Meningkatkan Hasil Belajar Di Masa Pandemi Covid-19 Desa Telangkah. *J-Abdi: Jurnal Pengabdian Kepada Masyarakat*, 2(1), 3635–3642. <https://doi.org/10.53625/jabdi.v2i1.2257>
- Mutmainnah, N., Izzati, N., & Jaelani, Z. A. (2025). Peran Logika Untuk Membangun Kemampuan Siswa SMPN 2 Labuapi Dalam Berpikir Kritis. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(01), 90–105. <https://doi.org/10.23969/jp.v10i01.23181>

- Nurhamidah, S., & Nurachadijat, K. (2023). Project based learning dalam meningkatkan kemandirian belajar siswa. *Jurnal Inovasi, Evaluasi Dan Pengembangan Pembelajaran (JIEPP)*, 3(2), 42–50. <https://doi.org/10.54371/jiepp.v3i2.272>
- Pratikno, H., Wulansari, A., & Purwanto, K. (2024). Relevansi Intuisi Kebahasaan Penutur terhadap Kemampuan Berpikir Logis dan Kritis dalam Penyampaian Argumentasi. *ALFABETA: Jurnal Bahasa, Sastra, dan Pembelajarannya*, 7(1), 142–151. <https://doi.org/10.33503/alfabeta.v7i1.1077>
- Przybył, J., & Pawlak, M. (2023). Language Learning Strategies. Dalam *Personality as a Factor Affecting the Use of Language Learning Strategies: The Case of University Students* (hlm. 45–117). Springer International Publishing. https://doi.org/10.1007/978-3-031-25255-6_2
- Puling, H., Manilang, E., & Lawalata, M. (2024). Logika dan Berpikir Kritis: Hubungan dan Dampak Dalam Pengambilan Keputusan. *Sinar Kasih: Jurnal Pendidikan Agama Dan Filsafat*, 2(2), 164–173. <https://doi.org/10.55606/sinarkasih.v2i2.319>
- Ramadhan, E. H., & Hindun, H. (2023). Penerapan model pembelajaran berbasis proyek untuk membantu siswa berpikir kreatif. *Protasis: Jurnal Bahasa, Sastra, Budaya, dan Pengajarannya*, 2(2), 43–54. <https://doi.org/10.55606/protasis.v2i2.98>
- Rendi, R., Marni, M., Neonane, T., & Lawalata, M. (2024). Peran Logika Dalam Berfikir Kritis Untuk Membangun Kemampuan Memahami Dan Menginterpretasi Informasi. *Sinar Kasih: Jurnal Pendidikan Agama Dan Filsafat*, 2(2), 82–98. <https://doi.org/10.55606/sinarkasih.v2i2.313>
- Róg, T. (2025). The Notion and Scope of Task-Based Language Teaching. Dalam *Task-based Language Teaching and Beyond: L2 Pragmatics Instruction for Young Learners* (hlm. 65–141). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-86566-4_2
- S, D., & Christopher, B. P. (2024). A decadal review of organizational identification: Insights from bibliometric analysis and content analysis. *Humanities and Social Sciences Communications*, 11(1), 1483. <https://doi.org/10.1057/s41599-024-03990-7>
- Sahar, R., & Munawaroh, M. (2025). Artificial intelligence in higher education with bibliometric and content analysis for future research agenda. *Discover Sustainability*, 6(1), 401. <https://doi.org/10.1007/s43621-025-01086-z>
- Sani, R. A. (2021). *Pembelajaran Berorientasi AKM: Asesmen Kompetensi Minimum* (1 ed., Vol. 1). Bumi Aksara. <https://books.google.co.id/books?id=vo8IEAAAQBAJ>
- Sani, R. A. (2022). *Inovasi Pembelajaran* (1 ed., Vol. 1). Bumi Aksara. <https://books.google.co.id/books?id=B4d-EAAAQBAJ>
- Sari, D. S. P. (2024). Meningkatkan Softskill Siswa Melalui Model Pembelajaran Project Based Learning dalam Pembelajaran Tematik di Madrasah Ibtidaiyah. *Andragogi: Jurnal Pendidikan dan Pembelajaran*, 4(2), 79–93. <https://doi.org/10.31538/adrg.v4i2.1300>
- Sudjimat, D. A., Nyoto, A., & Romlie, M. (2020). *Interdisciplinary Project-Based Learning* (1 ed., Vol. 1). Media Nusa Creative (MNC Publishing). <https://books.google.co.id/books?id=lwZMEAAAQBAJ>
- Suprayitno, D., Amalia, K., & Khamidi, A. (2025). Manajemen Pembelajaran Berbasis Proyek dalam Upaya Peningkatan Prestasi Akademik Peserta Didik: Penelitian Multi Situs di SMKN 1 Cerme dan SMKN 1 Duduksampeyan. *JPG: Jurnal Pendidikan Guru*, 6(2), 331–342. <https://doi.org/10.32832/jpg.v6i2.20076>
- Triwulandari, S., & U.S, S. (2022). ANALISIS INTELIGENSI DAN BERPIKIR KRITIS. *utile: Jurnal Kependidikan*, 8(1), 50–61. <https://doi.org/10.37150/jut.v8i1.1618>
- Unwakoly, S. (2022). Berpikir kritis dalam filsafat ilmu: Kajian dalam ontologi, epistemologi dan aksiologi. *Jurnal filsafat indonesia*, 5(2), 95–102. <https://doi.org/10.23887/jfi.v5i2.42561>

- Utami, R. P., Muksar, M., & Rufiana, I. S. (2025). Studi Pendahuluan Kemampuan Awal Berpikir Kritis Siswa Sekolah Dasar SDN Tunge 2 Wates Kediri. *Briliant: Jurnal Riset dan Konseptual*, 10(1), 117–123. <https://doi.org/10.28926/briliant.v10i1.1880>
- Winarso, A., Siswanto, J., & Roshayanti, F. (2023). Pengembangan perangkat pembelajaran pada materi interaksi makhluk hidup dengan lingkungan ditinjau dari kemampuan pemecahan masalah dan berfikir kritis siswa SMP Negeri 2 Moga. *Jurnal Kualita Pendidikan*, 4(1), 16–27. <https://doi.org/10.51651/jkp.v4i1.342>

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