

Experiential Learning and Pedagogical Skill Development among Pre-Service Teachers in Teaching Practice Programs: An Academic Analysis

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ABSTRACT

This study examines the role of *Field Experience Practice* (PPL) as an experiential learning platform in developing pre-service teachers' pedagogical skills. Using a qualitative descriptive approach, the research analyzes how students from Economic Education and English Language Education programs apply lesson planning, classroom management, and assessment skills during PPL at SMA Mutiara Insan Nusantara. Data were gathered through observation, interviews, and documentation, and analyzed using the Miles and Huberman interactive model. Findings indicate that PPL effectively enhances pedagogical competence by linking theory with real teaching experiences. Students successfully implemented student-centered strategies such as *Problem-Based Learning (PBL)*, *Think-Pair-Share (TPS)*, and *role play*, improving student engagement and critical thinking. Despite challenges in classroom adaptation, reflective practice proved essential for professional growth. The study concludes that PPL fosters pedagogical excellence and recommends strengthening mentorship, technology integration, and reflective learning to support 21st-century teacher education.

Keywords: experiential learning, pedagogical skills, field experience practice, teacher education, reflective practice

INTRODUCTION

Field experience practice (PPL) represents a critical component of teacher education programs, functioning as a bridge between the theoretical knowledge acquired in the classroom and its application in real school contexts. Through PPL, final-year students have the opportunity to implement various learning theories, curricula, and teaching strategies within school environments, subsequently playing a strategic role in shaping the pedagogical skills required for aspiring teachers (Sunaryo et al., 2020; Meha & Bullu, 2021; (Mujiyanto & Sudjalil, 2021; Widiyani et al., 2024). Notably, pedagogical skills encompass the ability of teachers to understand student characteristics, design meaningful learning experiences, manage classrooms, conduct effective teaching processes, and carry out comprehensive evaluations of learning outcomes (Aslinda et al., 2025; Hasriani et al., 2025; Setyani & Rozi, 2025). This indicates that PPL acts as an essential platform for prospective teachers to transition smoothly from theory to practice.

Despite its critical importance, empirical data suggest that not all pre-service teachers demonstrate optimal pedagogical skills during their practical experiences. Several studies indicate that students frequently encounter difficulties in designing lessons that cater to student needs, managing heterogeneous classrooms, and conducting authentic assessments (Mujiyanto & Sudjalil, 2021; Kasmuri et al., 2025; Setyani & Rozi, 2025). This gap points to a disconnect between theoretical mastery learned in higher education and the practical applications needed in educational settings. Consequently, there is a pressing need to analyze the pedagogical skills of pre-service teachers during PPL to evaluate their readiness

for professional teaching roles (Riyana et al., 2024; Samakmur et al., 2024)(Nilawati et al., 2025).

Furthermore, the evolution of national curricula emphasizing student-centered learning, higher-order thinking skills (HOTS), and the integration of technology in educational practices demands an enhancement in the pedagogical abilities of prospective teachers (Fuadi & Tulistiyono, 2022; Widiyani et al., 2024). Thus, PPL should not only serve as a venue for applying theoretical knowledge but also as a realm for pedagogical reflection and innovation. Hence, this study aims to analyze the pedagogical skills of pre-service teachers within PPL, focusing on aspects of planning, implementation, and evaluation of teaching practices (Darmawan et al., 2025; Sari et al., 2025).

Theoretical Review

1. Teacher Pedagogical Skills

Pedagogical skills are defined as the professional competencies teachers possess to manage the learning processes of their students. These skills include understanding student characteristics, designing and implementing educational lessons, and evaluating learning outcomes to foster optimal student potential (Sunaryo et al., 2020; Aslinda et al., 2025; Setyani & Rozi, 2025). For pre-service teachers, the development of these pedagogical skills serves as a vital indicator of their preparedness to enter the teaching profession (Ahmad et al., 2025; Widiyani et al., 2024).

The Ministry of National Education Regulation No. 16 of 2007 establishes seven components of pedagogical skills, including understanding student characteristics, mastery of learning theories, curriculum development, educating learning activities, potential student development, effective communication with students, and assessment and evaluation of learning outcomes (Nilawati et al., 2025). Therefore, cultivating these competencies through direct teaching experiences, as practiced in PPL, is fundamental for developing proficient teachers.

2. Field Experience Practice (PPL)

PPL is an academic activity intentionally designed to provide pre-service teachers with real-life teaching experiences in partner schools. During PPL, students learn to recognize classroom dynamics, social interactions within schools, and various teaching challenges (Mujianto & Sudjalil, 2021; Samakmur et al., 2024). The primary aim of PPL is to develop professional and pedagogical competencies among pre-service teachers through firsthand experiences in educational environments.

PPL serves as an implementational training venue where students learn to plan lessons, manage classrooms, utilize instructional media and technology, and reflect on their teaching practices. This process connects theoretical knowledge obtained in classroom settings with real-life situations, enabling students to internalize the values of professionalism necessary for educators (MZ et al., 2025).

3. Learning Theories as the Basis for Developing Pedagogical Skills

The application of learning theories in teaching practice is crucial for developing pedagogical skills. Constructivist theories (Piaget and Vygotsky) emphasize that effective learning occurs when students actively build their knowledge through experiences. As such, PPL students are encouraged to implement strategies that allow students to explore, discuss, and discover concepts independently (Anwar et al., 2025; Amrin, 2021). Behaviorist theories (Skinner) highlight the importance of reinforcement and repetition in learning, suggesting that pre-service teachers can enhance student motivation by employing positive reinforcement strategies (Farwati et al., 2024; Tohiroh, 2024). Humanistic theories (Rogers and Maslow) stress the significance of empathy and communication, which are essential for establishing positive relationships with students and creating a conducive learning atmosphere (Tsaniah et al., 2025; Islamia et al., 2024).

By comprehensively understanding and applying these theoretical frameworks, pre-service teachers are expected to exhibit reflective, adaptive, and contextual pedagogical skills during their PPL experiences (Pakpahan et al., 2024).

The integration of experiential learning through PPL plays a pivotal role in the development of pedagogical skills among pre-service teachers. By bridging theoretical concepts with practical applications, PPL equips aspiring educators with the necessary competencies to navigate the complexities of modern classrooms effectively. Ongoing research is needed to further explore the challenges and successes experienced by these future educators, enhancing the overall quality of teacher training programs.

METHODS

The research methodology adopted for this study follows a qualitative descriptive approach designed to comprehensively elucidate the pedagogical skills of pre-service teachers during the implementation of Field Experience Practice (PPL). This methodological framework is selected because it effectively unveils the contextualized experiences of students throughout their learning processes in partner schools, focusing specifically on components of lesson planning, execution, and assessment (Amaliah et al., 2024; Suharyat et al., 2022). The subjects of this study consist of students enrolled in the Economic Education and English Language Education programs who are engaged in PPL at SMA Mutiara Insan Nusantara. Data collection is realized through various techniques including direct observation, in-depth interviews, and documentation, which primarily aim to assess the students' capabilities in classroom management, pedagogical methods employed, and their adaptability to students' dynamics in real teaching scenarios (Amaliah et al., 2024; Suharyat et al., 2022).

Data analysis is conducted utilizing the Miles and Huberman model, encompassing three critical stages: data reduction, data display, and conclusion drawing (Keles & Munthe, 2025). Data reduction involves filtering and condensing the raw data collected to highlight significant findings, while data display facilitates organizing data in an interpretable manner. The final stage, drawing conclusions, synthesizes the analyzed data to formulate meaningful insights regarding the research questions posed (Keles & Munthe, 2025). To validate the integrity of the research findings, triangulation of sources and methods is employed, incorporating feedback from mentor teachers, student participants, and relevant documentation from PPL activities as comparative material (Ramolula & Nkoane, 2024). Here, the researcher assumes a pivotal role as the primary instrument for data interpretation, relying on direct observation and reflective practices about the pedagogical processes involved (Keles & Munthe, 2025).

In employing a qualitative descriptive approach, this research aims to furnish a detailed understanding of the pedagogical competencies of pre-service teachers as aspiring professional educators. It also aspires to elucidate the tangible contributions of the PPL program toward strengthening teaching competencies in real-world educational settings (Azizah et al., 2024; Li, 2024). By focusing on these aspects, the study aims to fill existing gaps in literature pertaining to the practical application of pedagogical skills in diverse educational landscapes, particularly within the Indonesian context (Azizah et al., 2024; Lee & Wu, 2024). The findings are expected to contribute significantly to the discourse on teacher education and development, ultimately enhancing the efficacy and quality of educational practices within teacher training programs (Nurtanto et al., 2022; Lee & Wu, 2024).



Figure 1. Enhancing Pedagogical Skills

RESULTS AND DISCUSSION

I. Overview of Teaching Practice Implementation

The Field Experience Practice (PPL) conducted by students in the Economic Education and English Language Education programs at SMA Mutiara Insan Nusantara in October 2025 reflects the application of various student-centered learning strategies. Each student strived to implement educational theories learned in higher education into real classroom situations. Observations and activity reports indicated that students taught classes X and XI, with class sizes ranging from 21 to 25 students. Overall, students demonstrated basic pedagogical skills, including lesson planning, classroom management, and adapting teaching approaches to student characteristics. However, challenges were noted, particularly in adapting to the school environment and managing classroom dynamics. These challenges were addressed by applying reflective strategies, exemplifying students' commitment to continuous professional competence development.

The findings echo the theoretical framework that emphasizes the significance of practical experience in teacher education. According to Lander et al. (2020), embedding active pedagogies within pre-service education can increase perceived competence, confidence, and readiness to implement innovative teaching strategies. Additionally, reflective practice plays a crucial role in the professional development of pre-service teachers, aligning with Schön's insights on the importance of reflective thinking in enhancing teaching practices (Chen, 2023). Furthermore, implementing diverse teaching strategies can help mitigate initial assimilation difficulties, emphasizing the necessity for supportive mentorship during practice.



Figure 2. Teaching process

2. Implementation of Pedagogical Skills in Economic Education Students

a. Student-Centered Learning Approaches

Khairurrahmi Pangaribuan, a student from the Economic Education program, conducted lessons on October 6 and 10, 2025, in class X utilizing a student-centered approach. This method prioritizes active student engagement in the learning process, aligning with constructivist principles that assert knowledge construction through social interaction and direct experience. During these lessons, 23 students attended, and two were absent due to illness. Initial difficulties such as adapting to the teaching environment were reported, a common phenomenon during the early phases of PPL where new teachers strive to understand school culture, student characteristics, and classroom communication styles.

To mitigate these challenges, Khairurrahmi utilized strategies involving observing student behavior, fostering interpersonal communication, and adapting teaching styles to the classroom's dynamics. Subsequent sessions revealed improvements in classroom management skills and participatory teaching methods, despite persistent issues with some students lacking focus during classes. This process of adaptation aligns with the literature on the essential need for teachers to develop adaptive strategies in managing diverse student behaviors (Al-Amrat, 2024; Smith et al., 2023).

b. Discussion-Based Learning and Role Play

Another student, Ilha Hafilda Fatiha, executed PPL activities on October 7, 2025, in class X-2, where discussions and role play methods were employed to introduce the topic of economic concepts and actors. The use of role play exemplified the application of contextual learning methods that deepen understanding of abstract concepts through real-life experiences. Challenges faced included adapting to the high-energy requirements and dynamic expressions needed in a high school setting, revealing the importance of understanding student characteristics and responses for future lesson planning. This aligns with Schön's perspective that reflective thinking is essential for professional development (Suryati et al., 2023). Such reflection aids in recognizing the necessity for adaptability and dynamics in educational approaches and requires professional preparation to handle varied classroom settings effectively.

3. Implementation of Pedagogical Skills in English Language Education Students

a. Application of Problem-Based Learning (PBL)

On October 9, 2025, Maharani Iswanda employed Problem-Based Learning (PBL) in class X, utilizing interactive PowerPoint learning media to stimulate critical thinking through relevant real-life problem-solving. Among the 25 students enrolled, four were absent, revealing obstacles primarily related to student passivity during lessons. This indicates the urgency to adjust teaching strategies to enhance engagement through more communicative and appealing methods.

To resolve these issues, the student increased the use of interactive media and modified activities to be more participatory, reflecting a sound understanding of social constructivism, which emphasizes interaction in knowledge building. The adjustments made by Maharani suggest a competent pedagogical skill set in aligning teaching strategies with students' diverse characteristics.

b. Supporting Activities and Administrative Readiness

On the same day, Mutiara Fadhila from the English Language Education program engaged in PPL but faced challenges due to student absence for a study tour. Instead, she assisted the mentor teacher in preparing English language assessment materials. Such involvement, although indirect, offered insights into the broader role of teachers as assessment planners, not only as direct educators.

c. Application of the Think-Pair-Share (TPS) Method

On October 10, 2025, Nina Sari taught class X-2 using the Think-Pair-Share (TPS) method, aimed at enhancing student participation through individual thinking, pair discussions, and whole-class sharing. The class of 25 included students with varied engagement levels. She encountered two significant challenges: overly active students lacking focus and passive students with good English proficiency reluctant to participate.

Nina effectively addressed these challenges through differentiated approaches, redirecting active students' attention with direct questions and encouraging quieter peers through interpersonal interactions. Such strategies demonstrated adaptive classroom management, respectful of distinct student characteristics and potential. This method exemplifies the integration of humanistic principles into education, fostering a supportive learning environment that acknowledges each student's uniqueness.

4. Thematic Analysis of PPL Results

From this comprehensive reporting, three thematic areas regarding students' pedagogical skills during PPL were identified:

- a. **Adaptation and Understanding of School Context:** Each student faced adaptation phases influenced by school culture and student characteristics. Observational and active interaction strategies were deployed to navigate these transitional challenges, reinforcing professional identity development in teachers.
- b. **Application of Active and Contextual Learning:** Students effectively adopted innovative teaching methods like PBL, TPS, role play, and student-centered approaches. Their implementation illustrates a well-grounded theoretical understanding of collaborative learning and experiential education.
- c. **Reflective Abilities and Classroom Management:** Students successfully engaged in reflective practices following lesson executions, demonstrating growth in adaptive teaching strategies for subsequent lessons. This competency indicates a solid grasp of the reflective practitioner principles essential for ongoing professional development.

The findings illuminate the vital role of experiential practice in honing the pedagogical competencies of pre-service teachers, emphasizing their ability to apply theoretical constructions in practical contexts. The study underscores the necessity for supportive frameworks and mentorship that facilitate reflective practices, continuous improvement, and the evolution of teaching methodologies in diverse educational settings

Discussion

The findings of this research indicate that the implementation of Field Experience Practice (PPL) significantly contributes to the development of students' pedagogical skills. Through direct practice, the students learn to manage classrooms, interact effectively with students, and adapt teaching methods to real-life situations. This observation reinforces the assertions that pedagogical competence is comprehensively developed through repeated and reflective empirical experiences Amaliah et al. (2024)(doi:10.61721/pebsas.v2i1.346). The

hands-on experiences that students engage in during PPL allow them to contextualize educational theories and apply them adaptively in a variety of teaching scenarios, facilitating their growth into capable educators Dewi et al. (2024)(doi:10.62872/a5xyk576).

Moreover, the diversity of learning methods employed by students reflects their critical thinking abilities in translating theoretical knowledge into practice. The application of student-centered learning approaches and collaborative methods like Problem-Based Learning (PBL) and Think-Pair-Share (TPS) demonstrates their capacity to align with 21st-century educational paradigms that highlight active, collaborative learning and the cultivation of higher-order thinking skills Levin et al. (2025)(doi:10.1371/journal.pone.0317255). The pathways established through these pedagogical techniques not only enhance student engagement but also foster an environment conducive to critical dialogue and deep learning. Such strategies have been shown to improve the educational experience significantly Chowdhury (2024)(doi:10.6007/ijarped/v13-i4/23474).

Despite these advancements, the findings also reveal that classroom management and adaptation to student behavior remain primary challenges for pre-service teachers. This insight underscores the necessity for PPL mentors and teacher education institutions to prioritize simulation-based training and systematic reflective practices. These methods can better prepare students to confront the complex dynamics of classroom environments Levin et al. (2023)(doi:10.3389/feduc.2023.1116626). Engaging pre-service teachers in simulated environments allows them to confront interpersonal, management, and instructional challenges in a controlled setting, thereby enhancing their readiness for actual teaching Abarua et al. (2023)(doi:10.31004/obsesi.v7i4.4982).

Furthermore, ongoing professional development workshops focusing on classroom management strategies and student engagement techniques are warranted to equip future educators with a robust toolkit for effective teaching Seprudin (2024)(doi:10.62207/0pb7vm02). The integration of reflective practices into these training programs would ensure that graduates not only possess foundational knowledge but also the ability to critically assess their pedagogical approaches and adapt them accordingly based on student needs and classroom contexts Hamilton & Margot (2024)(doi:10.1108/sup-01-2024-0001). Such comprehensive preparation is essential to fostering educators who are well-equipped to address the multifaceted challenges present in modern educational environments.

In conclusion, the PPL experience is pivotal for the pedagogical evolution of preservice teachers. Through practical application, iterative learning, and reflective dialogue, these educators can bridge the gap between theory and practice, ultimately refining their teaching competencies. Future initiatives should focus on enhancing these experiences, ensuring that emerging teachers are not only knowledgeable but also skillfully prepared to inspire their future students Navos et al. (2024)(doi:10.11594/ijmaber.05.04.22).

CONCLUSION

This study reaffirms that *Field Experience Practice* (PPL) constitutes a fundamental component of teacher education, serving as a vital bridge between theoretical pedagogy and the practical realities of classroom teaching. Through direct engagement in authentic teaching environments, pre-service teachers gain valuable opportunities to internalize pedagogical theories, apply instructional models, and develop the professional competencies required of effective educators.

The findings demonstrate that PPL at SMA Mutiara Insan Nusantara significantly enhances the pedagogical skills of pre-service teachers, particularly across three core dimensions: (1) lesson planning, which involves the ability to design learning strategies, media, and assessments aligned with students' characteristics; (2) lesson implementation, where

active and student-centered approaches such as *Problem-Based Learning (PBL)*, *Think-Pair-Share (TPS)*, and *role play* were successfully applied; and (3) evaluation and reflection, which emphasize students' capacities to assess learning outcomes while engaging in reflective practice to improve subsequent teaching sessions.

The study also indicates that the use of active and contextual learning strategies promotes critical thinking, collaboration, and engagement among students—key competencies of 21st-century education. Moreover, the PPL experience nurtures empathy, communication, and humanistic classroom management, fostering a positive and supportive learning environment.

Nevertheless, challenges persist, particularly in adapting to school culture and managing diverse classroom dynamics. These challenges highlight the need to strengthen pre-service teachers' adaptive and reflective capacities, ensuring they can respond effectively to real classroom complexities.

In summary, the findings emphasize that PPL is not merely a compulsory academic activity but an *experiential learning arena* that shapes the professional identity of future teachers. Through iterative experience, reflective practice, and continuous adaptation, pre-service teachers are able to transform theoretical knowledge into meaningful, contextually grounded pedagogical competence.

Recommendations

Based on the findings and analyses, several strategic recommendations are proposed to improve the quality of PPL implementation and the pedagogical competence of pre-service teachers:

a. Strengthening Pre-PPL Preparation Programs

Teacher education institutions should provide comprehensive pre-PPL training that includes *microteaching simulations*, classroom management workshops, and real-case discussions. Such preparation will help students better understand school dynamics and instructional challenges prior to their field experiences.

b. Enhancing Mentorship and Supervisory Support

Both mentor teachers and university supervisors should serve as *reflective mentors* who not only evaluate but also guide pre-service teachers through constructive feedback and reflective dialogue. This mentorship approach can cultivate deeper pedagogical awareness and bridge the gap between theory and practice.

c. Integrating Technology in Teaching Practice

In line with digital literacy demands in modern curricula, teacher candidates should be trained to utilize digital learning tools such as interactive PowerPoints, learning management systems (LMS), and online collaboration platforms. The use of technology can enrich learning experiences and increase student engagement.

d. Developing Reflective and Adaptive Competence

Teacher education programs should systematically incorporate reflective activities, such as *teaching journals*, peer reflection sessions, and video-based self-assessment. These reflective mechanisms encourage pre-service teachers to critically analyze their teaching practices and make data-driven pedagogical adjustments.

e. Fostering Tri-Partite Collaboration (University – Partner Schools – Local Authorities)

Stronger collaboration among universities, partner schools, and local education authorities is essential to align PPL objectives with the needs of schools and current educational policies. Such collaboration can promote innovative teaching practices and contextualize teacher training within real educational challenges.

f. Conducting Longitudinal and Mixed-Method Research on PPL Outcomes

Future studies should employ longitudinal and mixed-method approaches to examine the long-term impact of PPL on novice teachers' professional performance. Continuous evaluation of PPL programs can provide empirical evidence for improving teacher education curricula and ensuring sustainable pedagogical competence.

Academic Implications

This study contributes to the broader discourse on teacher education by underscoring the importance of *experiential learning* as a transformative process in developing reflective, adaptive, and student-centered pedagogical skills. The findings provide valuable insights for curriculum developers, teacher education institutions, and partner schools seeking to strengthen the synergy between theory, practice, and reflection in teacher professionalization.

REFERENCE

- Ahmad, A., Putra, E., Hasnawati, H., Liana, D., & Mardiah, M. (2025). Implementasi supervisi pembelajaran sebagai upaya peningkatan kualitas pengajaran mahasiswa PPL. *Edukasi*, 13(1), 1–15. <https://doi.org/10.61672/judek.v13i1.2916>
- Al-Amrat, M. (2024). The role of preparing teachers' understanding of the co-teaching and collaborative teaching models in developing their teaching experiences. *International Journal of Religion*, 5(2), 466–480. <https://doi.org/10.61707/rq5mbm10>
- Amaliah, A., Clorion, F., & Pasaribu, G. (2024). Importance of mastering teacher pedagogical competence in improving the quality of education. *PEBSAS*, 2(1), 29–37. <https://doi.org/10.61721/pebsas.v2i1.346>
- Amrin, S. (2021). Analisis keterampilan mengajar mahasiswa pendidikan ekonomi Universitas Flores. *Edukatif Jurnal Ilmu Pendidikan*, 3(1), 58–65. <https://doi.org/10.31004/edukatif.v3i1.233>
- Anwar, A., Zainal, Z., & Tawil, T. (2025). Peningkatan hasil pembelajaran melalui model problem basic learning di kelas I SD. *PJP*, 5(1), 345. <https://doi.org/10.70713/pjp.v5i1.26481>
- Aslinda, A., Zakī, A., Arwadi, F., Ikram, M., & Marselina, L. (2025). Program kerja gotong royong di Desa Jenetaesa Kecamatan Simbang. *C-JCosDev*, 1(1), 19–23. <https://doi.org/10.64619/v1i1.5>
- Azizah, N., Mumpuniarti, M., Rudiyati, S., & Evans, D. (2024). Elementary teachers' pedagogical competencies in supporting students with learning difficulties. *International Journal of Evaluation and Research in Education (IJERE)*, 13(2), 723. <https://doi.org/10.11591/ijere.v13i2.26345>
- Chen, S. (2023). Modeling the effect of loving pedagogy dispositions and teacher self-efficacy on teacher burnout. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1157324>
- Darmawan, A., Putrie, C., & Rista, N. (2025). Pengaruh minat menjadi guru dan praktik pengalaman lapangan (PPL) terhadap kesiapan mengajar mahasiswa Pendidikan Ekonomi Universitas Panca Sakti Bekasi angkatan 2021. *Arus Jurnal Pendidikan*, 5(2), 141–153. <https://doi.org/10.57250/ajup.v5i2.1569>
- Farwati, S., Dhamayanti, W., & Sastrosupadi, A. (2024). Evaluasi pelaksanaan program praktik pengalaman lapangan (PPL) terhadap hasil penilaian program praktik pengalaman lapangan (PPL). *JND*, 3(2), 78–91. <https://doi.org/10.59291/jnd.v3i2.64>
- Fuadi, S., & Tulistiyono, F. (2022). Persepsi positif peserta didik terhadap guru praktik pengalaman lapangan PAI FITK UNSIQ di SMK Darunnajah Banjarnegara. *Jurnal Riset Rumpun Agama dan Filsafat*, 1(2), 8–16. <https://doi.org/10.55606/jurrafi.v1i2.350>
- Hasriani, H., Irianto, W., Wardhana, N., Abbar, H., & Ulum, K. (2025). ChatGPT dalam praktik PPG: strategi baru tingkatkan hasil belajar siswa SMP Negeri 7 Malang. *Jurnal Informatika Teknologi dan Sains*, 7(2), 721–728. <https://doi.org/10.51401/jinteks.v7i2.5752>

- Islamia, L., Lestari, D., & Sutrisno, S. (2024). Dampak penerapan sistem blok terhadap keterlaksanaan mata kuliah PPL I PPG Prajabatan Informatika di SMKN 10 Malang. *Jurnal Pembelajaran Bimbingan dan Pengelolaan Pendidikan*, 4(9), 14. <https://doi.org/10.17977/um065.v4.i9.2024.14>
- Kasmuri, K., Pimay, A., Riyadi, A., & Karim, A. (2025). Pemberdayaan masyarakat melalui pemanfaatan tanah pekarangan untuk mendukung ketahanan pangan di Kelurahan Mijen Kecamatan Mijen Kota Semarang. *Jurnal Solma*, 14(1), 1465–1478. <https://doi.org/10.22236/solma.v14i1.17873>
- Keles, S., & Munthe, E. (2025). A systematic review of research on how initial teacher education prepares teachers for work on discrimination, racism and prejudices in schools. *Review of Education*, 13(1). <https://doi.org/10.1002/rev3.70030>
- Lander, N., Mazzoli, E., Cassar, S., Symington, N., & Salmon, J. (2020). Embedding active pedagogies within pre-service teacher education: implementation considerations and recommendations. *Children*, 7(11), 207. <https://doi.org/10.3390/children7110207>
- Lee, S., & Wu, J. (2024). Preparing teachers for the future: microteaching in the immersive VR environment. *ReCALL*, 36(3), 251–269. <https://doi.org/10.1017/s0958344024000089>
- Li, H. (2024). Education challenges in developing digital competence and critical thinking skills in a post-information age. *Culture and Education*, 36(2), 419–445. <https://doi.org/10.1177/11356405241259598>
- Meha, A., & Bullu, N. (2021). Hubungan kesiapan mengajar dan proses praktik pengalaman lapangan dengan keterampilan dasar mengajar mahasiswa Pendidikan Biologi. *Edukatif Jurnal Ilmu Pendidikan*, 3(2), 412–420. <https://doi.org/10.31004/edukatif.v3i2.323>
- Mujianto, G., & Sudjalil, S. (2021). Pengelolaan kelas pada praktik pengalaman lapangan (PPL) Pendidikan Profesi Guru (PPG) Prajabatan bidang studi Bahasa Indonesia di SMA Negeri 7 Malang. *Satwika Kajian Ilmu Budaya dan Perubahan Sosial*, 6(2), 255–265. <https://doi.org/10.22219/kembara.v6i2.14057>
- MZ, H., Efendi, S., Wahyuni, E., Syafriana, N., Ilham, S., & Alam, T. (2025). Penguatan peran mahasiswa STAIN Meulaboh dalam pengabdian masyarakat melalui program PPL di Mahkamah Syari'ah Suka Makmue Nagan Raya. *ZJPM*, 2(1), 143–152. <https://doi.org/10.71153/zona.v2i1.309>
- Nilawati, S., Rasyid, M., & Mania, S. (2025). Implementasi model evaluasi CIPP pada program praktik pengalaman lapangan (PPL) mahasiswa Fakultas Ilmu Tarbiyah dan Keguruan. *Jurnal Ilmu Pendidikan dan Sosial*, 4(1), 53–60. <https://doi.org/10.58540/jipsi.v4i1.824>
- Nurtanto, M., Sudira, P., Sofyan, H., Kholifah, N., & Triyanto, T. (2022). Professional identity of vocational teachers in the 21st century in Indonesia. *Journal of Engineering Education Transformations*, 35(3), 30–36. <https://doi.org/10.16920/jeet/2022/v35i3/22085>
- Pakpahan, S., Herman, H., Saragih, S., Tannuary, A., Berlien, R., Silalahi, T., ... & Rumapea, E. (2024). Studi kasus praktek pengalaman lapangan (PPL) mata pelajaran Bahasa Inggris di UPTD SMP Negeri 7 Pematangsiantar. *PMSDU*, 2(2), 59–64. <https://doi.org/10.37985/pmsdu.v2i2.351>
- Ramolula, K., & Nkoane, M. (2024). Pedagogical training of lecturers for higher education. *International Journal of Research in Business and Social Science*, 13(6), 330–338. <https://doi.org/10.20525/ijrbs.v13i6.3425>
- Riyana, M., Hiskya, H., Suradji, F., & Hanifah, S. (2024). Analisis kepuasan sekolah sebagai pihak penerima mahasiswa PPL PPG Prajabatan dalam upaya meningkatkan kualitas pendidikan. *Edukatif Jurnal Ilmu Pendidikan*, 6(1), 385–392. <https://doi.org/10.31004/edukatif.v6i1.6058>
- Samakmur, S., Rambey, M., & Vebrina, D. (2024). Pengaruh praktik pengalaman lapangan (PPL) terhadap kesiapan menjadi guru mahasiswa Prodi Ekonomi/Akuntansi Institut

- Pendidikan Tapanuli Selatan. *Indo-Fintech Intellectuals Journal of Economics and Business*, 4(5), 2640–2655. <https://doi.org/10.54373/ifijeb.v4i5.2022>
- Sari, G., Putri, R., & Yenira, F. (2025). Upaya meningkatkan hasil belajar siswa melalui model pembelajaran discovery learning pada mata pelajaran IPA kelas VIII di SMPN 10 Padang. *Tsaqofah*, 5(3), 2891–2902. <https://doi.org/10.58578/tsaqofah.v5i3.6025>
- Setyani, Y., & Rozi, F. (2025). Pengaruh dukungan orang tua, kesejahteraan guru, dan program pengalaman lapangan terhadap minat profesi guru pada mahasiswa Pendidikan Ekonomi Universitas Negeri Semarang. *Business and Accounting Education Journal*, 6(1), 63–75. <https://doi.org/10.15294/baej.v6i1.11987>
- Smith, E., Kayser, C., Wallace, M., & Bosnake, A. (2023). Soar into STEMEd: examining the impact of a service-learning internship on a pre-service teacher's conceptions of culturally responsive teaching. *Education Sciences*, 13(6), 552. <https://doi.org/10.3390/educsci13060552>
- Suharyat, Y., Ichsan, I., Santosa, T., Yulianti, S., & Amalia, K. (2022). Literature review: TPACK-based science learning in supporting teacher quality in Indonesia. *International Journal of Education and Literature*, 1(2), 44–50. <https://doi.org/10.55606/ijel.v1i2.25>
- Sunaryo, H., Zuriah, N., & Handayani, T. (2020). Kesiapan mahasiswa Pendidikan Profesi Guru (PPG) dalam jabatan untuk menempuh program praktik pengalaman lapangan. *Jurnal Pendidikan Profesi Guru*, 1(1), 29–38. <https://doi.org/10.22219/jppg.v1i1.12430>
- Suryati, N., Kuswandi, D., & Astuti, U. (2023). Exploring EFL pre-service teachers' mentoring process and the challenges in their practicum. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v8i7.13247>
- Tohiroh, N. (2024). Dari ruang kelas ke dunia nyata: pelajaran berharga dari bangku kuliah PPG ke PPL di SMP. *Jurnal Integrasi dan Harmoni Inovatif Ilmu-Ilmu Sosial*, 4(6), 4. <https://doi.org/10.17977/um063v4i6p4>
- Tsaniah, S., Asmari, A., Rumaf, Z., Pratama, A., Sidiq, A., Murni, M., ... & Alfarizi, S. (2025). Laporan kelompok praktik pengalaman lapangan (PPL) Fakultas Keguruan Ilmu Pendidikan (FKIP) Unitomo di SMK PGRI 13 Surabaya. *Ekspresi*, 2(1), 100–105. <https://doi.org/10.62383/ekspresi.v2i1.518>
- Widiyani, T., Wijayanti, I., & Siswanto, J. (2024). Analisis kompetensi pedagogik mahasiswa PPL PPG Prajabatan dalam pembelajaran di sekolah dasar. *Ainara Journal (Jurnal Penelitian dan PKM Bidang Ilmu Pendidikan)*, 5(2), 145–155. <https://doi.org/10.54371/ainj.v5i2.424>