

Analysis of the Pedagogical Competence Development of Madrasah Teachers in Serang Regency

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ABSTRACT

The quality of education in Islamic schools (madrasah) is highly dependent on teachers' pedagogical competence, which is a core skill in managing student-centred teaching and learning processes. However, the implementation of this competence development has not been internalized regularly. This study aims to identify and analyze the forms of pedagogical competence development activities and their supporting and inhibiting factors for Islamic school teachers in Serang Regency. This study employs a descriptive qualitative approach via a structured survey of teachers at eight private Madrasah Tsanawiyah in Serang Regency, utilizing convenience sampling to gather both quantitative metrics and qualitative narratives. Data collected on the frequency, types, and organizers of competency development were processed through systematic data reduction and synthesis to provide a comprehensive analysis of teacher pedagogical growth. The results showed that the majority of teachers (68.9%) rarely participated in competence development activities, with the main obstacles being adjustments to teaching schedules and budget constraints. The most dominant type of activity participated in was training (70.2%), driven by the accessibility of certified independent online training such as PINTAR from the Ministry of Religious Affairs. The most popular topics were curriculum or syllabus development and learning design, with the main organizers being schools or foundations and the Ministry of Religious Affairs. Overall, there is a significant gap between teachers' professional awareness and the reality of implementation, which is hampered by issues of time, budget, and lack of frequency of ongoing activities, so that a hybrid, adaptive, and integrated development model is needed in the teacher's workload.



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A. INTRODUCTION

Madrasah educational institutions are instrumental in developing the character and intellect of students, grounded in strong religious values in Indonesia. Furthermore, the quality of education in schools and madrasahs depends heavily on the competence and professionalism of their teachers (Aris et al., 2022). The crucial role of teachers in achieving national education goals requires teachers to meet several basic requirements. These requirements include relevant academic qualifications, a teaching certificate, physical and mental health, and essential skills to actualize established educational goals (Republik Indonesia Government, 2005). Therefore, developing the competence of madrasah teachers is a strategic issue that requires in-depth attention and study.

Among these requirements, competence occupies a central position as the core of teacher professionalism. Within the teacher competency framework, pedagogical competence is one of the core competencies that must be mastered, particularly related

to the management of the teaching and learning process (Manik et al., 2023). This competency reflects a teacher's ability to plan, implement, and evaluate student-focused learning effectively and dialogically (El-Fadhil et al., 2025). Effective teachers must master various pedagogical competencies, starting from understanding the foundations of education and student characteristics, designing and implementing innovative learning, to utilizing technology and evaluation (Batubara et al., 2024), and supported by curriculum development and developing student potential (Khimmatiev et al., 2021).

Overall, the primary goal of mastering pedagogical competence is to create a student-centred learning ecosystem. This aligns with the demands of modern education to empower students to become independent and active learners (Kanchana, 2019). Actualized pedagogical competence will be demonstrated by concrete performance indicators, namely the creation of a safe and comfortable learning environment, the realization of effective, student-centred learning, and the implementation of student-centred assessment, feedback, and reporting (Merdekawaty & Suryani, 2024).

To achieve and improve these indicators, teachers can participate in various forms of pedagogical competency development activities (Zohriah, 2024). These activities include education, training, technical guidance, or workshops (Yahya et al., 2023); participation in workshops or joint activities to develop curriculum and learning tools (Pawartani & Suciptaningsih, 2024); and active participation in scientific activities such as seminars, webinars, colloquia, or panel discussions (Hertz et al., 2022). Madrasah teachers can enhance their professional competencies through programs organized by their schools, the Ministry of Religious Affairs (Sunengsih et al., 2021), or various external stakeholders, including learning communities, universities, and government institutions (Apud, 2020).

This study aims to identify and analyze the forms of pedagogical competency development activities participated in by madrasah teachers in Serang Regency. Although previous studies have theoretically mapped indicators of pedagogical competence and identified various formal professional development platforms, significant gaps remain in understanding the effectiveness of madrasah teacher participation at the local level, particularly in Serang Regency. Previous research has tended to focus on public school teachers in urban settings, often overlooking the unique dynamics and specific obstacles faced by madrasah teachers under the auspices of the Ministry of Religious Affairs, who have distinct managerial and sociocultural characteristics. Therefore, this study aims to fill this gap by deeply analyzing the relationship between forms of activity participation and contextual supporting and inhibiting factors, in order to produce a more applicable and sustainable development model.

B. METHODS

This research adopted a descriptive qualitative approach using a survey method. This qualitative approach was chosen to explore and describe in depth the phenomenon of teacher pedagogical competency development. The research focused on analyzing the frequency, type, materials, and organizers of activities participated in by teachers. The study was conducted in eight private Madrasah Tsanawiyah (Islamic Junior High School) located in Serang Regency, Banten, in early November 2025.

While the study population included all private Madrasah Tsanawiyah teachers in Serang Regency, the actual sample was selected using a convenience sampling technique. Respondent teachers were active teachers with a minimum of two years of service and were willing to participate in the questionnaire. Data was collected through a structured questionnaire that combined closed-ended answer choices for quantitative data and open-ended questions to gain in-depth qualitative insights. Descriptive qualitative

analysis included data reduction in the form of selecting and focusing on relevant narrative data, data presentation, and drawing conclusions to produce a coherent description and analysis of the development of teacher pedagogical competence in Serang Regency.

C. RESULT AND DISCUSSION

1. Frequency of Teacher Involvement in Pedagogical Competency Development Activities

This study describes the development of pedagogical competence of teachers at private Madrasah Tsanawiyah in Serang Regency during the 2024-2025 period. The first question concerns the frequency of teacher involvement in pedagogical competence development activities. Respondents were asked to choose one of three options: regularly, at least once every two months; rarely, at least once a year; and never. Respondents' answers are presented in Figure 1.

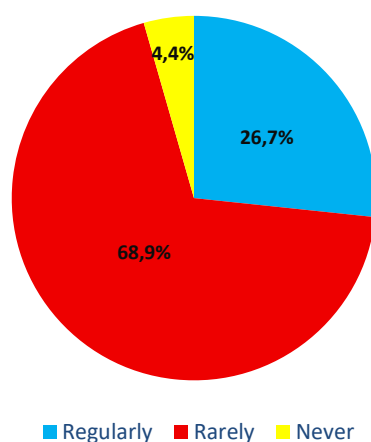


Figure 1. Frequency of Teacher Involvement in Pedagogical Competency Development Activities

The diagram in Figure 1, which shows the frequency of involvement of private Madrasah Tsanawiyah teachers in Serang Regency in pedagogical competence development activities, shows that the majority of teachers are only rarely involved (68.9%). Meanwhile, only about a quarter of respondents reported regularly participating in pedagogical competence development activities at least once a month. The smallest proportion, at 4.4%, were teachers who reported never participating. This data indicates that despite awareness of the importance of competency development, its implementation has not become a regular, internalized activity for most teachers.

Teachers who regularly participate in pedagogical competence development generally demonstrate a strong commitment to ongoing professionalism and improving the quality of learning. The primary reasons for regular involvement centre on efforts to improve the quality of learning, enhance student learning outcomes, and enhance teacher competency in general. One insightful response indicated that these routine activities serve as a means of evaluation and improvement, particularly when teachers face specific challenges in the classroom, such as student difficulties or a lack of assessment variation. Participating in or holding monthly activities allows teachers to identify solutions and implement improvements efficiently and sustainably (Lai & Peng, 2019).

Most teachers who reported infrequent involvement in competency development activities cited external and managerial factors rather than a lack of interest. The main

obstacles they faced were adapting to the school's schedule and relying on activity agendas organized by external parties, such as the Madrasah Working Group, Madrasah Supervisors, or activities recommended through the Ministry of Religious Affairs' Centre for Information, Training, and Learning (PINTAR). Furthermore, one respondent highlighted budget constraints as a factor preventing them from regularly participating in activities. Despite their low level of engagement, this group still recognized the purpose of competency development, which is to improve their performance and pedagogical skills (Morgan et al., 2022).

The smallest group of teachers—those who have never participated in professional development—faces fundamental barriers including financial constraints, irrelevant training materials, and a critical lack of information. These gaps highlight the urgent need for targeted funding and improved communication to ensure equitable access to growth opportunities for all educators.

2. Types of Pedagogical Competency Development Activities

The second question concerned the types of pedagogical competency development activities participated in or implemented by madrasah teachers in Serang Regency. Respondents were given multiple answer choices. The options included education, training, technical guidance; curriculum development and learning activities; scientific activities such as seminars, webinars, colloquiums, symposiums, conferences, or panel discussions; and others. Respondents who had never participated in pedagogical competency development were also given the option "never." The answer choices for the second question are presented in Figure 2.

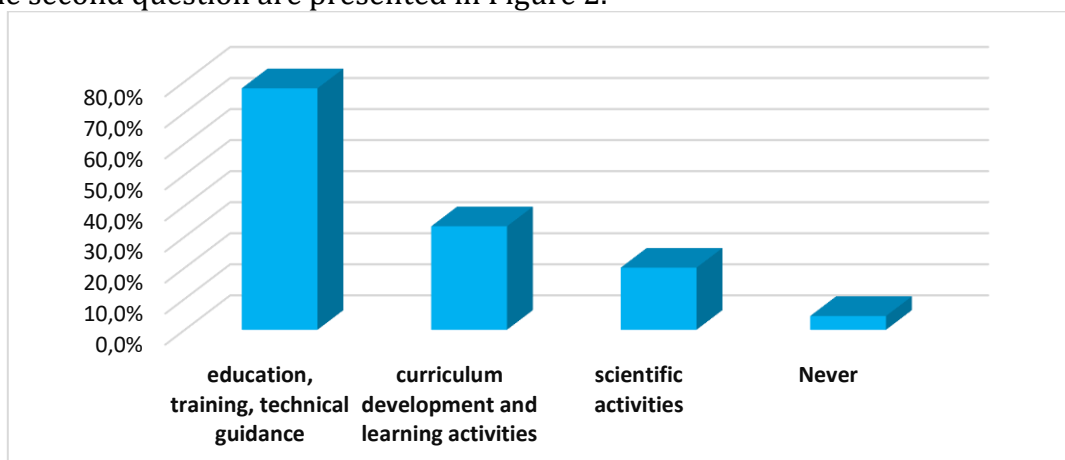


Figure 2. Types of Teacher Pedagogical Competency Development Activities

The diagram in Figure 2 shows that the most dominant type of activity teachers participated in was training, chosen by the majority of respondents, at 77.8%. Several teachers specifically explained that they participated in training because of the availability of PINTAR, a certified independent online training program. This training is considered highly efficient due to its online format and 20-hour lesson duration, allowing teachers to learn without having to leave their teaching duties or incur travel costs (Hassan, 2021).

The second most frequently chosen activity type was workshops or joint activities to develop curriculum and learning materials. Involvement in these activities indicates that some teachers actively participate in the application and collaborative process, directly oriented towards classroom teaching materials and strategies. This is also influenced by the dynamic curriculum changes in madrasah environments (Anriani et al., 2025).

Respondents chose scientific activities such as seminars, webinars, colloquiums, symposiums, conferences, or panel discussions (20.0%). Teachers who chose scientific activities generally considered time efficiency due to their short duration. Scientific activities serve as a source of up-to-date information and insights on the latest trends, research, and pedagogical practices (Shal et al., 2025). Some teachers participated in more than one type of activity, citing the various explanations presented. Furthermore, one respondent stated that educators must have a growth mindset, always seeking ways to improve. Teacher participation in various self-development activities allows teachers to gradually master and apply new teaching strategies (Beram et al., 2023).

3. Pedagogical Competency Development Activity Materials

The fourth question concerned the pedagogical competency development material studied by madrasah teachers in Serang Regency. Respondents were given multiple answer choices. The available answer choices were understanding educational insights or foundations; understanding students; curriculum or syllabus development; learning design; implementing educational and dialogical learning; utilizing learning technology; evaluating learning outcomes; and developing students to actualize their various potentials. Respondents who had never participated in pedagogical competency development were also given the option "never." The respondents' answer choices for the second question are presented in Figure 3.

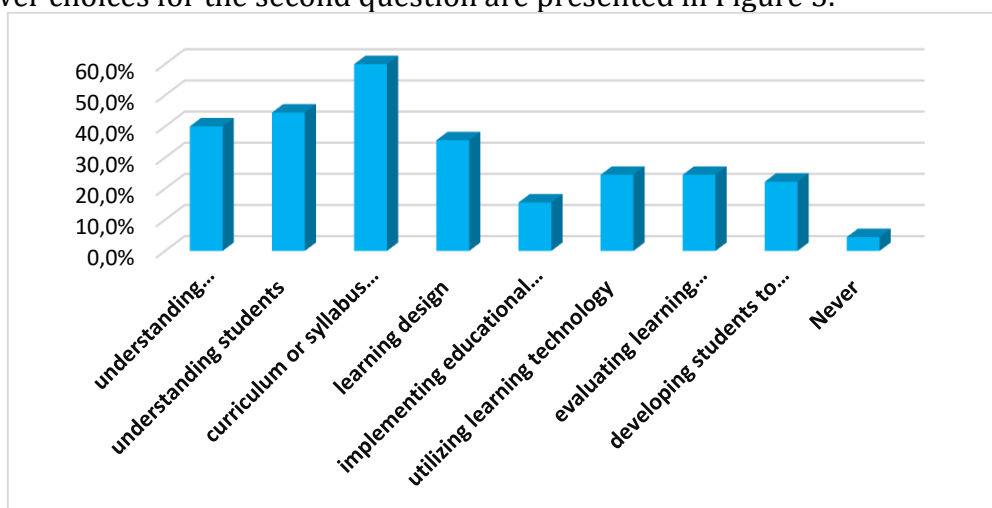


Figure 3. Pedagogical Competency Development Activity Materials

The diagram in Figure 3 shows that the pedagogical competency development topic with the highest percentage was curriculum or syllabus development. This high percentage was clearly driven by the dynamics of curriculum changes occurring in madrasahs, particularly the implementation of the Independent Curriculum. From 2022 to the 2024/2025 academic year, the Ministry of Religious Affairs' continuous regulatory and policy changes, including the addition of the Love-Based Curriculum approach, encouraged teachers to continually update their understanding and teaching tools (Syaripudin & Hasna, 2025).

Other technical and applied materials, such as lesson design, the use of learning technology (which is also quite popular), and evaluation of learning outcomes, demonstrate teachers' focus on implementing relevant teaching practices. Teachers' tendency to select materials related to curriculum, design, technology, and evaluation indicates their efforts to adapt to the administrative and technical demands of modern teaching (Ajani, 2024).

Materials focused on understanding students and developing them to actualize their various potentials also received significant attention. Respondents who chose student-related topics demonstrated strong motivation centred on identifying and facilitating students' potential, encouraging them to explore it, and developing teachers' competencies in educating students holistically. This focus demonstrates a paradigm shift from teacher-centred teaching to student-centred teaching, in line with the philosophy of the Independent Curriculum (Rohimat et al., 2023).

Most respondents chose more than one answer option, indicating that teachers follow a holistic program of activities and tailor their understanding to their needs. One key reason for teachers choosing diverse topics was the desire to help teachers make ethical and wise pedagogical decisions in the classroom and adapt teaching methods to align with prevailing educational values and goals. Respondents also stated that this is crucial for building a positive and inclusive classroom climate. By studying various materials in an integrated manner, teachers are expected to become educators who are not only technically competent but also thoughtful and capable of creating a learning environment that supports the development of students' full potential (Gu, 2024).

4. Institution Organizing Pedagogical Competency Development

The fifth question concerns the institutions that organize pedagogical competency development programs for madrasah teachers in Serang Regency. Respondents were given multiple answer choices. The available options were the school or foundation where the respondent works, the Ministry of Religious Affairs, learning communities, universities, the Education Office or government agencies other than the Ministry of Religious Affairs, other private institutions, and "Never". Respondents who had never participated were also given the option "never." Respondents' answer choices for the second question are presented in Figure 4.

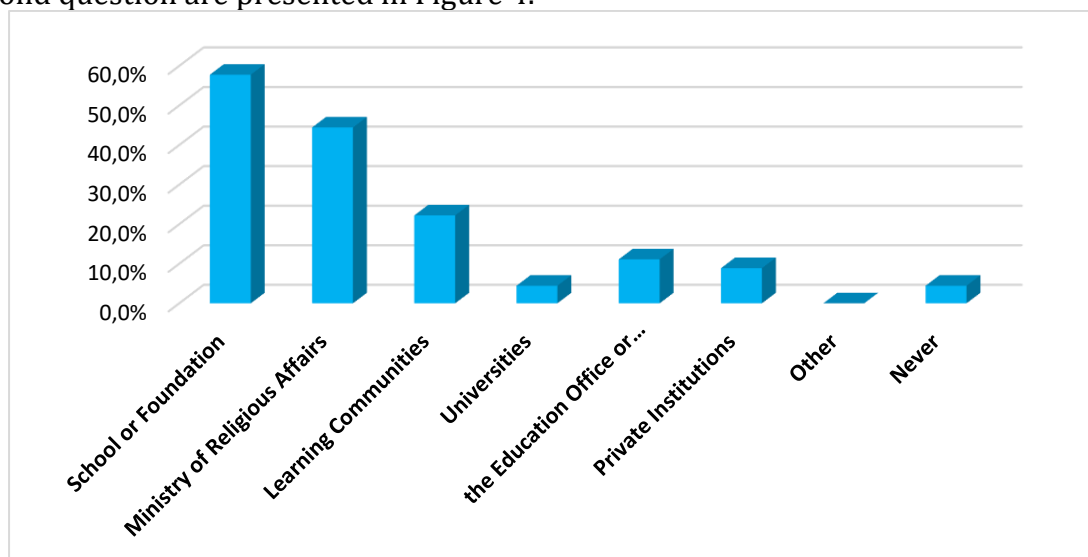


Figure 4. Institution Organizing Pedagogical Competency Development

The diagram in Figure 4 shows that the two primary sources of competency development activities most frequently participated in by teachers were the school or foundation where the respondents worked and the Ministry of Religious Affairs. The high percentage of schools or foundations demonstrates the crucial role of school-based professional development (SPC) (Ke et al., 2019). In the context of private schools, foundations have the authority to ensure the quality of teachers' teaching aligns with the institution's vision and mission (Ahsan & Aimah, 2025). This concept is

highly effective because the activities are contextual and directly relevant to the specific needs of the school. This also reflects the role of school or foundation principals as instructional leaders responsible for facilitating the improvement of teaching staff competencies. Furthermore, the Ministry of Religious Affairs plays a crucial role, as it is the primary regulator and manager of madrasah education.

The role of learning communities, such as MGMPs (teacher organizations), reached 22.2%. This diagram, while lower than the two main sources, remains significant in promoting professional learning communities. Activities through MGMPs (Musyawarah Guru Mata Pelajaran) are crucial for collective learning and the exchange of best practices among teachers of the same subject from different schools. Effective professional learning communities must be supported by regular interaction, a focus on curriculum and student outcomes, and collaborative practices (Brown et al., 2018).

External sources other than the Ministry of Religious Affairs, such as the Education Office or other government institutions, universities, and other private institutions, contributed relatively little. The 4.4% figure for universities indicates that the role of academics or pedagogical research from universities as sources of theory and innovation has not been widely integrated into the competency development of private madrasah teachers in Serang. This could be an opportunity for collaboration to enrich the material with a strong theoretical foundation. Education Office or Private Institutions: Furthermore, the minimal involvement of education offices and private institutions indicates that madrasah teachers are more focused on their own ecosystems and do not take many initiatives from outside the madrasah sector.

Overall, these data indicate that the development of pedagogical competency of private madrasah teachers in Serang Regency is centripetal, with teachers tending to seek training from the closest and most administratively relevant institutions, namely foundations/schools and the Ministry of Religious Affairs. This ensures local relevance and regulatory compliance but may limit teachers' exposure to innovations and best practices from other external sources.

5. Challenges and Hopes

The survey concluded with open-ended questions exploring the real challenges and expectations of private Madrasah Tsanawiyah teachers in Serang Regency regarding pedagogical competency development. Respondents' answers can be grouped into managerial, financial, and learning quality issues.

The pedagogical development of private Madrasah Tsanawiyah teachers in Serang Regency is primarily hindered by a significant gap between professional awareness and practical implementation. The most dominant obstacles are managerial and financial, specifically severe time constraints caused by high workloads and training schedules that conflict with classroom duties. Consequently, professional development is often treated as an "extra" activity rather than an integrated part of the teaching role. This struggle is compounded by limited budgets, inadequate facilities, and personal digital infrastructure issues, such as internet quotas, which are particularly prevalent in private institutions compared to their public counterparts.

To address these challenges, teachers express a strong desire for more frequent, high-quality, and routine training that offers up-to-date materials and problem-solving approaches for the classroom. Their expectations extend beyond external workshops to include on-the-job support, such as clinical coaching and improved principal supervision. Furthermore, there is a clear call for better institutional welfare, including

specific budget allocations for training and incentives, to ensure that professional growth is sustainable and not a financial burden on the individual teacher.

Ultimately, bridging this gap requires an integrated policy that formalizes competency development within the standard teacher workload. By synchronizing efforts between school foundations and the Ministry of Religious Affairs, the educational system can move toward producing professional educators capable of fostering the "intelligent, critical, and virtuous" generation envisioned by the Independent Curriculum.

D. CONCLUSION AND SUGGESTIONS

This study concludes that although private Madrasah Tsanawiyah teachers in Serang Regency have a high level of professional awareness, the implementation of pedagogical competency development is still hampered by time constraints and reliance on superiors' instructions. The dominance of institution-based training (foundations/Ministry of Religious Affairs) indicates that professional development has not been internalized independently. The main focus of current development is curriculum adaptation (including the Love-Based Curriculum) and a shift towards a student-centered learning approach.

The most frequently cited obstacles are limited time, budget, or facilities, and the ineffective quality of online learning. Teachers hope for increased frequency of routine activities and improved program quality to provide practical solutions for teaching practice. These expectations are oriented toward improving the quality of education, developing professional teachers, and creating a safe and innovative learning environment for students. Crucially, the government and foundations need to address time management and allocate specific budgets for teacher development so that pedagogical competency development activities are no longer perceived as a burden but rather as a fundamental part of the professional duties of madrasah teachers. This should also be a serious concern for universities, as sources of theory and innovation, to foster collaborations to enrich material with a strong theoretical foundation.

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REFERENCES

- Ahsan, M. N., & Aimah, S. (2025). Implementation of Total Quality Management in Islamic Private Educational Institutions: Resilience to Budget Constraints. *Southeast Asian Journal of Islamic Education Management*, 6(1), 21–36.
- Ajani, O. A. (2024). Enhancing pre-service teacher education: crafting a technology-responsive curriculum for modern classrooms and adaptive learners. *Research in Educational Policy and Management*, 6(2), 209–229.
- Anriani, T., Ningsih, N. S., Sari, P. S., Cahyaningsih, E., & Santosa, S. (2025). Curriculum Changes in Indonesia: The Dynamics of Implementing the 2013 Curriculum Towards the Merdeka Curriculum in Madrasah Ibtidaiyah. *Ideguru: Jurnal Karya Ilmiah Guru*, 10(2), 956–965.
- Apud, A. (2020). Professional Development of Private Madrasah Teachers in Serang City. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 5(1), 62–79.
- Aris, A. S., Haqq, A. A., & Winarso, W. (2022). A skill application model to improve teacher

- competence and professionalism. *International Journal of Educational Methodology*, 8(2), 331–346.
- Batubara, N. K. I., Sinaga, A. I., & Haidir, H. (2024). Analysis of Fiqh Teachers' Pedagogical Competence in Implementing the Merdeka Curriculum in Madrasah Aliyah. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 10(1), 300–306.
- Beram, S., Awang, M., Ismail, R., Noor, N., & Yusoff, N. (2023). Professional Leadership Competencies for Middle-Level Educational Leaders. *Jurnal Pengurusan*, 68, 1–13.
- Brown, B. D., Horn, R. S., & King, G. (2018). The effective implementation of professional learning communities. *Alabama Journal of Educational Leadership*, 5, 53–59.
- El-Fadhil, B. M., Riyadi, A. R., & Maulidah, N. (2025). The Effectiveness of Clinical Supervision by School Principals in Improving Elementary School Teachers' Pedagogical Competence in the Implementation of the Merdeka Curriculum. *Elementary Journal: Jurnal Pendidikan Guru Sekolah Dasar*, 8(1), 99–106.
- Gu, M. (2024). Empowering vocational education through digital technology: Innovating the teaching landscape. *International Journal of New Developments in Education*, 6(6), 131–136.
- Hassan, M. K. (2021). Online teaching challenges during COVID-19 pandemic. *International Journal of Information and Education Technology*, 11(1), 10–18178.
- Hertz, B., Grainger Clemson, H., Tasic Hansen, D., Laurillard, D., Murray, M., Fernandes, L., & Rutkauskiene, D. (2022). A pedagogical model for effective online teacher professional development—findings from the Teacher Academy initiative of the European Commission. *European Journal of Education*, 57(1), 142–159.
- Kanchana, S. (2019). Empowering students to become effective learners through activity based learning. *Humanities & Social Sciences Reviews*, 7(5), 57–62.
- Ke, Z., Yin, H., & Huang, S. (2019). Teacher participation in school-based professional development in China: does it matter for teacher efficacy and teaching strategies? *Teachers and Teaching*, 25(7), 821–836.
- Khimmataliev, D. O., Khakimov, J. O., Sharipova, S. S., Turaev, M. F., Gofirov, M. J., & Murodova, Z. Q. (2021). Formation of didactic competence of students as a pedagogical problem. *Annals of the Romanian Society for Cell Biology*, 25(4), 7552–7567.
- Lai, Y. C., & Peng, L. H. (2019). Effective teaching and activities of excellent teachers for the sustainable development of higher design education. *Sustainability*, 12(1), 28.
- Manik, E., Nasution, S., & Sumanti, S. T. (2023). Analisis Kompetensi Pedagogik Guru Pada Proses Pembelajaran. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 4(3), 659–668.
- Merdekawaty, A., & Suryani, E. (2024). Analysis of Pre-Service Teachers' Pedagogical Competence in Implementing the Merdeka Curriculum. *Titian Ilmu: Jurnal Ilmiah Multi Sciences*, 16(2), 103–109.
- Morgan, L., Close, S., Siller, M., Kushner, E., & Brasher, S. (2022). Teachers' experiences: social emotional engagement–knowledge and skills. *Educational Research*, 64(1), 41–59.
- Pawartani, T., & Suciptaningsih, O. A. (2024). Teacher Competency Development to Support the Implementation of the Merdeka Curriculum. *JlIP-Jurnal Ilmiah Ilmu Pendidikan*, 7(3), 2182–2191.
- Pemerintah_Republik_Indonesia. (2005). *Law Number 14 of 2005 on Teachers and Lecturers*.
- Rohimat, S., Haryati, S., & Hapsari, N. (2023). Analysis of the Effectiveness of Process Differentiation in Chemistry Learning in the Implementation of the Merdeka

- Curriculum at SMA Negeri 6 Serang City. *VEKTOR: Jurnal Pendidikan IPA*, 4(2), 37–45.
- Shal, T., Ghamrawi, N., & Ghamrawi, N. A. (2025). Webinars for teacher professional development: Perceptions of members of a virtual professional community of practice. *Open Learning: The Journal of Open, Distance and e-Learning*, 40(1), 91–107.
- Sunengsih, N., Syaodih, C., & Soro, S. H. (2021). Implementation of the Minister of Religious Affairs Regulation on Madrasah Supervisors and Islamic Education Supervisors in Schools to Improve Teacher Performance in Bandung City. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, 4(7), 621–623.
- Syaripudin, A., & Hasna, R. (2025). The 2013 Curriculum and the Ministry of Religious Affairs' "Love Curriculum": An Integrative Strategy for Character and Spiritual Education. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(02).
- Yahya, Y. A., Satyarini, M. D., & Setyaningsih, S. (2023). Development and Training of Teacher Competencies at MA Darul Ulum Donorojo Jepara. *Journal of Economic Education and Entrepreneurship*, 4(1), 27–34.
- Zohriah, A. (2024). The Urgency of Human Resource Development in the Field of Education. *Jambura Journal of Educational Management*, 323–344.