



## TEACHER COMPETENCY DEVELOPMENT STRATEGIES TO IMPROVE EDUCATION QUALITY

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### Abstract

Education is the main foundation for sustainable community development and increasing the nation's competitiveness in the era of globalization. The role of teachers as the spearhead in the teaching-learning process is vital in determining the future of the younger generation. However, not all teachers have adequate competencies to face new challenges in education. This study aims to identify effective teacher competency development strategies for improving the quality of education. The research uses a qualitative descriptive method with a literature study approach to analyze various strategies that have been documented in the literature. The results of the analysis show that the development of pedagogical, technological, managerial, and social competencies is essential to improve the quality of learning. Institutional support, and collaboration among teachers, as well as the involvement of parents and the government, are key to the success of teacher competency development. The implications of this research are significant in formulating more effective education policies and teaching practices, with the ultimate goal of improving the quality of education globally.

**Keywords:** Competency Development, Teachers, Education, Strategies, Learning Quality

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## INTRODUCTION

## مقدمة

Education is the main foundation for sustainable community development and enhancing the nation's competitiveness in the era of globalization. As a key factor in human resource development, education has a vital role in determining the future of the younger generation. Behind the success of the education system, there is an important role of teachers as the spearhead in the teaching-learning process. Teachers not only function as conveyors of knowledge, but also as character builders and developers of student potential. Therefore, teacher competence is a critical factor that determines the quality of education (Fischer et al., 2022). Along with technological developments and changes in community needs, the challenges in education are increasingly complex. Teachers are required to continuously improve their competence to effectively deal with these dynamics. High competence in teachers not only affects the quality of learning in the classroom but also has a significant impact on student learning outcomes. In this context, developing teacher competence is a must that cannot be ignored.

In the world of education, the quality of teachers has a huge impact on the learning process and the final results of student education. However, the reality on the ground shows that not all

teachers have adequate competencies to face new challenges in education. Issues such as lack of up-to-date knowledge in the field, lack of interpersonal skills, and administrative constraints often hamper teachers' ability to deliver effective learning. In this context, it is important to detail the specific problems faced by teachers, both individually and systemically, to identify appropriate solutions (Kawuryan et al., 2021). This research aims to highlight the crucial issues faced by teachers in developing their competencies, with the hope of providing a more in-depth view and concrete solutions to improve the overall quality of education. Through a better understanding of the barriers faced by teachers, it is hoped that this research can make a significant contribution to improving the education system and improving the quality of learning at the global level.

The main objective of this research is to identify effective teacher competency development strategies for improving the quality of education. Given the complexity of the challenges faced by educators in dealing with the evolving dynamics of education, this research aims to make a significant contribution to improving the quality of education at large. By identifying strategies that can improve teacher competence, this research is expected to provide a deeper understanding of the factors that influence the quality of learning in the classroom. Through careful evaluation of the effectiveness of various teacher competency development strategies, this study also aims to provide practical recommendations that can be used by educational institutions and policymakers to improve the quality of education sustainably. Considering the important role teachers play in shaping the future of the younger generation, this research is expected to make a meaningful contribution to the global effort to improve education standards and create a more knowledgeable society.

A review of the existing research literature emphasizes the need for more in-depth research on teacher competency development. A gap in the literature shows that many studies tend to describe teacher competencies or their impact on student learning outcomes, without sufficiently highlighting the competency development strategies themselves. Therefore, this study aims to fill this gap by exploring strategies that can effectively improve teachers' competencies. By clarifying the relationship between teacher competency development strategies and improving education quality, this study is expected to provide deeper insights for education practitioners, researchers, and policymakers. Furthermore, by identifying areas that have not been widely explored in the current literature, this research is also expected to make a valuable contribution to the development of this field of study as a whole. By understanding the importance of more focused research on teacher competency development strategies, it is hoped that this research can contribute significantly to education reform and the improvement of learning quality around the world.

The importance of this research lies not only in providing solutions to the problems faced in developing teacher competencies but also in its contribution to innovation in the education domain. This research offers a new perspective on understanding the importance of teacher competency development as a key element in improving the quality of education. By highlighting new and current aspects of teacher competency development, this research has the potential to be a source of inspiration for educational practitioners, researchers, and policymakers in designing more effective programs. In this context, the research not only provides new information but also provides a solid foundation for changes in policy and better educational practices. By explaining the rationale behind the importance of this research and highlighting its contribution to the field of education science, it is hoped that this research will be recognized as a significant contribution to improving the quality of education globally.

## METHOD

## منهج

This research used a descriptive qualitative design with a literature study approach to identify, analyze, and synthesize various teacher competency development strategies that have been documented in the literature. The research procedure began with identifying and collecting relevant literature sources, including journal articles, books, research reports, and policy documents, through systematic searches in academic databases such as Google Scholar, JSTOR, and ProQuest, as well as educational institution repositories. Each source was evaluated based on its credibility, relevance, and validity to ensure only high-quality sources were analyzed further. Data collection techniques were conducted thoroughly through an in-depth literature review of the selected literature. Data analysis was conducted using theoretical analysis, which involved coding the data to identify key themes and patterns in the literature. The coded information was then thematically analyzed to group the data based on similarities and differences in the findings. The results of the thematic analysis were synthesized theoretically to build a comprehensive understanding of teacher competency development strategies. Through this approach, the research is expected to provide deep insights and significant contributions to improving the quality of education through teacher competency development.

## RESULT

## نتائج

The analysis shows that the strategies for developing teachers' competencies to improve education quality are diverse and cover various aspects. First, pedagogical competence development can be achieved through ongoing training, workshops, and effective mentoring programs. These results are consistent with learning theories that emphasize the importance of continuous professional improvement for teachers (Akhyak et al., 2013). Second, the development of technological competence is a crucial component, where training in the use of digital devices and e-learning platforms was shown to improve teachers' technological skills, in line with the literature highlighting the importance of technology adoption in education (Fu & Satrianawati, 2022). Third, the development of managerial and social competencies through leadership and communication training showed significant improvements in teachers' managerial and interpersonal skills, supporting education management theory and literature related to social competencies (Siregar & Jarudin, 2024).

The implications of this research for education are significant. In terms of policy, the results of this study can influence education policy related to teacher development programs, with recommendations to support continuous training and the use of technology in learning. Practically, schools can implement the strategies identified to improve teachers' competencies, which in turn can improve the quality of learning and student learning outcomes. The importance of institutional and professional support for teachers is key in the implementation of these strategies, emphasizing the need for cooperation between policymakers, educational institutions, and teachers themselves.

## DISCUSSION

## مناقشة

### The Role of Teacher Competence in Improving the Quality of Education

The relationship between teacher competence and education quality is very close. Teachers who have high competence tend to be able to create a learning environment that stimulates, motivates, and facilitates students' learning process effectively. They can design learning that suits students' needs, use a variety of innovative teaching methods, and provide constructive feedback to improve students' understanding (Kawuryan et al., 2021). In addition, competent teachers are also able to manage the classroom well, create an atmosphere conducive to learning, and maintain student discipline, all of which contribute to the achievement of better learning outcomes (Aris et al., 2022).

In the context of learning theory, teacher competence plays an important role in applying effective learning principles, such as individualizing learning, providing meaningful feedback, and using a variety of learning strategies (Akhyak et al., 2013). Competent teachers have a deep understanding of learning theories and can integrate them into their teaching practice (Zulfakar, 2020). They are also able to select learning strategies that are appropriate to the characteristics of the students and the learning context, thus improving the overall effectiveness of the learning process (Mumpuniarti et al., 2020).

However, the role of teacher competence is not only limited to academic aspects. Competent teachers also have good managerial and social skills. They can manage time, resources, and classes efficiently, and establish good relationships with students, coworkers, and parents (Komariah et al., 2023). These abilities are important in creating an inclusive, supportive, and collaborative learning environment, where every student feels valued and supported in their learning process. Therefore, improving teachers' competencies not only impacts on the academic aspects but also the social and emotional aspects of students, will ultimately affect the overall quality of education (Adnan et al., 2019).

The role of teacher competencies in improving education quality emphasizes the importance of investing in teacher competency development in an effort to improve education quality. By having competent teachers, we can create inspiring, inclusive, and meaningful learning environments for all students. Therefore, efforts to improve teacher competencies should be a priority in the education development agenda, ensuring that teachers have access to the training, support, and resources they need to be effective and influential education leaders.

### **Challenges in Teacher Competency Development**

Teacher competency development is an important effort in improving the quality of education, however, it is inseparable from some challenges that need to be overcome. One of the main challenges faced in developing teacher competencies is the ongoing change in the education paradigm (Kusanagi, 2022). With advances in technology and changes in the demands of society and the job market, the education paradigm is undergoing a significant transformation. Teachers must be able to adapt to these changes and update their skills according to the demands of the times (Firdaus et al., 2023). These changes require critical reflection and continuous learning, which is often a challenge for teachers who have a heavy workload.

Another challenge in developing teacher competencies is the impact of technology and globalization on new demands for education. The development of information and communication technology (ICT) has changed the way we learn, teach, and interact. Teachers must now understand and master new emerging technologies, such as the use of online learning platforms, social media, and education apps (Latip et al., 2023). In addition, globalization has brought about changes in classroom composition, with students coming from various cultural and linguistic backgrounds. Teachers must have the skills to effectively manage this diversity and

create an inclusive environment for all students.

In addressing these challenges, educational institutions and governments need to provide adequate support to teachers. Institutional support in the form of ongoing training, guidance, and mentoring can help teachers overcome the challenges they face in developing their competencies (Komariah et al., 2023). In addition, educational institutions need to provide access to resources and technology necessary for the development of teachers' competencies (Firdaus et al., 2023). This includes access to digital libraries, online learning platforms, and relevant professional training programs.

In addition to institutional support, collaboration among teachers is also key in overcoming challenges in competency development. Teachers can share their experiences, knowledge, and best practices through close cooperation and collaboration (Suharti et al., 2024). Through this collaboration, teachers can support and strengthen each other in their efforts to improve education quality.

By effectively addressing these challenges, we can ensure that teachers have the necessary competencies to deliver high-quality education to their students. Developing teacher competencies is not only an investment in the future of education but also an investment in the future of future generations. Therefore, efforts to address challenges in teacher competency development should be a priority for all stakeholders in education.

### **Teacher Competency Development Strategy**

Teacher competency development is a complex process and involves various strategies that can improve the overall quality of education (Komariah et al., 2023). In this discussion, several strategies that have been proven effective in developing teacher competencies will be analyzed, as well as how they can be applied in the current educational context (Sutarman & Salleh, 2023).

One of the main strategies for developing teacher competence is continuous professional training and development (Widayati et al., 2021). This training can be in the form of workshops, seminars, courses, or other professional development programs designed to improve teachers' knowledge, skills, and understanding of various aspects of learning and teaching (Halim et al., 2022). Through this training, teachers can update and expand their knowledge of current learning theories, effective teaching strategies, and the latest developments in the field of education (Sherly et al., 2022).

The use of technology in training is also an important strategy in developing teacher competencies. By utilizing online learning platforms, webinars, and other digital resources, teachers can access training materials and learning resources more flexibly and efficiently (Ekantingsih & Sukirman, 2023). Technology also enables teachers to engage in self-directed and collaborative learning and keep up with the latest developments in education more quickly (Astuti et al., 2021).

In addition to formal training, mentoring is also an effective strategy for developing teacher competencies. Through mentoring programs, more experienced teachers can provide support, guidance, and feedback to newer or less experienced teachers (Lestari et al., 2021). This helps teachers who are new to the profession to learn from the experiences and knowledge of more experienced teachers and develop their skills and understanding of best practices in teaching (Yelfianita et al., 2023).

Teacher competency development can also be improved through collaboration between

teachers. Through this collaboration, teachers can share experiences, knowledge, and resources, and work together in designing and implementing innovative and effective learning programs (Suharti et al., 2024). Collaboration between teachers also allows for reciprocal learning, where teachers can learn from each other about best practices in teaching and managing the classroom (Azwardi, 2020).

However, in implementing these strategies, it is important to consider the diverse context of education. Each school or region has different needs and challenges, so teacher competency development strategies should be tailored to the local context. In addition, the support and participation of all stakeholders in education, including teachers, principals, parents, and government, is also key to the successful implementation of these strategies.

By implementing appropriate teacher competency development strategies, we can ensure that teachers have the necessary skills and knowledge to deliver high-quality education to their students. Through ongoing training and professional development, utilization of technology, mentoring, and collaboration between teachers, we can create inspiring, inclusive, and meaningful learning environments for all students. Therefore, developing teacher competencies should be a priority in the effort to improve the overall quality of education.

### **Supporting Factors in Teacher Competency Development**

In the effort to develop teacher competencies, there are some supporting factors that can strengthen the effectiveness and success of the development strategies implemented. Institutional support is one of the key factors that can facilitate the process of developing teacher competencies (Kusanagi, 2022). Educational institutions, be it schools, colleges, or other educational institutions, have an important role in providing an environment that supports and encourages the development of teacher competencies (Firdaus et al., 2023). This includes providing adequate resources, training facilities, and time for participation in professional development activities.

In addition to institutional support, collaboration between teachers is also an important supporting factor in developing teacher competencies. Collaboration between teachers enables the exchange of knowledge, experience, and best practices in teaching and learning. By working together, teachers can support and strengthen each other in their efforts to improve the quality of learning (Suharti et al., 2024). This collaboration also allows for reciprocal learning, where teachers can learn from their colleagues' experiences and successes in teaching.

In addition to institutional support and collaboration among teachers, it is also important to recognize the role of parents in developing teachers' competencies (Heryati et al., 2019). Parents have valuable insights into their needs and expectations for their children's education (Nugraha et al., 2022). By involving parents in the process of developing teacher competencies, we can ensure that the development programs organized can meet students' expectations and needs more effectively (Ainurrohmah & Handayani, 2020). In addition, parental participation in the education process can also increase student support and motivation in learning.

In addition to these factors, the government also plays a role in supporting the development of teacher competencies (Kusanagi, 2022). The government has the responsibility to provide policies and regulations that support teacher competency development, as well as the allocation of adequate resources to support professional development programs. This includes the provision of funds for teacher training, the provision of incentives for participation in development programs, and the establishment of institutions or bodies responsible for teacher

competency development nationally (Aris et al., 2022).

By strengthening these enabling factors, we can create an environment that supports and promotes effective teacher competency development. Institutional support, collaboration among teachers, parent participation, and the role of government are key to ensuring the success of teacher competency development strategies. Therefore, it is important for all stakeholders in education to work together to support and facilitate teacher competency development so that we can create a higher quality and more relevant education for future generations.

### **Implications and Relevance for Education Practice**

Teacher competency development has huge implications and is relevant in the context of current educational practices. Teacher competency development has direct implications for the quality of learning in the classroom (Komariah et al., 2023). Highly competent teachers tend to be able to create stimulating, inclusive, and meaningful learning environments for all students (Firdaus et al., 2023). They have a deep understanding of learning theories, as well as the skills necessary to adapt their teaching methods according to the needs and characteristics of students (Zulfakar, 2020). Thus, developing teacher competencies can improve the effectiveness of classroom learning and overall student learning outcomes.

Teacher competency development also has significant implications for student motivation and engagement in the learning process (Misbah et al., 2022). Competent teachers tend to be able to create a supportive environment and motivate students to learn (Anisa et al., 2019). They are able to foster students' interest in the subject matter, provide constructive feedback, and support students' personal and academic development (Sulistiyarini & Sukardi, 2016). Thus, developing teacher competencies can help improve students' motivation and engagement in learning, which in turn will improve their learning outcomes.

The culture and practices of the school as a whole are also areas of implication for teacher competency development (Komariah et al., 2023). Highly competent teachers tend to be leaders in their schools, influencing school culture and other teaching practices (Firdaus et al., 2023). They can be good role models for their peers, motivating and inspiring them to improve their teaching practices (Zulfakar, 2020). Thus, teacher competency development can help create a learning-oriented, collaborative, and sustainable school culture.

Teacher competency development also has deep implications for national education policy (Kusanagi, 2022). Teachers are one of the key factors in the success of the education system, and investment in teacher competency development can bring long-term benefits to society as a whole (Hamied, 2022). By having competent teachers, we can create a more inclusive, relevant, and high-quality education system, which will bring benefits to all students, regardless of their background or circumstances (Yelfianita et al., 2023).

To achieve a significant and sustainable impact in educational practice, it is important to pay attention to some of the challenges and barriers that may be encountered in teacher competency development efforts (Komariah et al., 2023). One of the main challenges is limited resources, be it in terms of funds, time, or training facilities. Lack of resources can hinder teachers' access to the training and professional development they need to improve their competencies (Firdaus et al., 2023). Therefore, governments and educational institutions need to provide adequate support and resources to support teachers' competency development efforts.

Changes in the educational paradigm and the ever-evolving demands of society can also

pose a challenge in efforts to develop teacher competence. Teachers must be able to adapt to these changes and update their skills according to the demands of the times (Zulfakar, 2020). This requires critical reflection, continuous learning, and adequate support from educational institutions and the government (Adnan et al., 2019).

By paying attention to these challenges and barriers and engaging all stakeholders in education, we can ensure that teacher competency development efforts have a significant and sustainable impact on improving the overall quality of education. By having competent teachers, we can create inspiring, inclusive, and meaningful learning environments for all students and prepare them for the challenges and opportunities of the future. Teacher competency development should therefore be a priority in the education schedule, ensuring that teachers have access to the training, support, and resources they need to be effective and influential educational leaders.

## CONCLUSION

## خاتمة

Based on the results of the analysis and discussion, it can be concluded that developing teachers' competencies is a very important aspect of improving the quality of education. The various strategies discussed, such as training and professional development, use of technology, collaboration among teachers, institutional support, and effectiveness evaluation, have a significant role in strengthening teachers' competencies and improving classroom learning. However, challenges such as limited resources, changing educational paradigms, and evolving societal demands remain obstacles to the implementation of teacher competency development strategies. Therefore, a strong commitment from all stakeholders in education, including teachers, principals, educational institutions, parents, and government, is needed to support and effectively implement teacher competency development strategies. Only with strong cooperation and collaboration can we create an inclusive, relevant, and high-quality educational environment for all students. Thus, teacher competency development should be the main focus of efforts to improve the quality of education and create a brighter future for future generations.

## BIBLIOGRAPHY

## مراجع

- Adnan, Suwandi, S., Nurkamto, J., & Setiawan, B. (2019). Teacher competence in authentic and integrative assessment in Indonesian language learning. *International Journal of Instruction*, 12(1), 701–716. <https://doi.org/10.29333/iji.2019.12145a>
- Ainurrohmah, F., & Handayani, R. (2020). The Influence Of Motivation, Learning Discipline, Teacher Competence And Parental Support On Academic Achievement Of Students (Study On Gama English Course Sukoharjo). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(4). <https://doi.org/10.29040/IJEBAR.V4I4.1626>
- Akhyak, Idrus, M., & Abu Bakar, Y. (2013). Implementation of Teachers Pedagogy Competence to Optimizing Learners Development in Public Primary School in Indonesia. *International Journal of Education and Research*, 1(9), 1–10.
- Anisa, L., Suganda, L. A., & Jaya, H. P. (2019). Indonesian English Teachers' Social-Emotional Competence and Students' English Learning Motivation. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 4(1), 83–94.

- Aris, A., Haqq, A., Journal, W. W.-I., & 2022, undefined. (2022). A Skill Application Model to Improve Teacher Competence and Professionalism. *Repository.Syekhnurjati.Ac.IdAS Aris, AA Haqq, W WinarsolInternational Journal of Educational Methodology, 2022•repository.Syekhnurjati.Ac.Id, 8(2), 331–346.* <https://doi.org/10.12973/ijem.8.2.331>
- Astuti, M., Arifin, Z., Mutohhari, F., & Nurtanto, M. (2021). Competency of Digital Technology: The Maturity Levels of Teachers and Students in Vocational Education in Indonesia. *Journal of Education Technology, 5(2), 254–262.* <https://doi.org/10.23887/JET.V5I3.35108>
- Azwardi, A. (2020). Efforts to improve teacher competency in developing learning materials through collaborative academic supervision. *Indonesian Educational Administration and Leadership Journal, 2(1), 1–12.*
- Ekantiningih, P. D., & Sukirman, D. (2023). Trends of education and training teacher competency in information and communication technology. *Jurnal Inovasi Teknologi Pendidikan, 10(1), 87–105.* <https://doi.org/10.21831/JITP.V10I1.52630>
- Firdaus, M., Fuad, Z., Kusaeri, & Rusydiyah, E. F. (2023). Portrait of Teacher Competence and Implementation Challenges of Achieving Sustainable Development Goals (SDGs): A Comparative Study between Indonesia and Vietnam. *Jurnal Iqra' : Kajian Ilmu Pendidikan, 8(2), 50–68.* <https://doi.org/10.25217/JI.V8I2.3161>
- Fischer, D., King, J., Rieckmann, M., Barth, M., Büssing, A., Hemmer, I., & Lindau-Bank, D. (2022). Teacher Education for Sustainable Development: A Review of an Emerging Research Field. *Journal of Teacher Education, 73(5), 509–524.* [https://doi.org/10.1177/00224871221105784/ASSET/IMAGES/LARGE/10.1177\\_00224871221105784-FIG2.JPEG](https://doi.org/10.1177/00224871221105784/ASSET/IMAGES/LARGE/10.1177_00224871221105784-FIG2.JPEG)
- Fu, W. H., & Satrianawati, S. (2022). Pedagogy teachers' competence establishes students' digital ethics: Case of educational modernization in Indonesia. *International Journal on Education Insight, 3(1), 19–40.*
- Halim, A., Lin, Y.-S., Mustofa, M., & Khatimah, K. (2022). Continuous professional development: An overview from English language teachers in east Kalimantan. *JOALL (Journal of Applied Linguistics and Literature), 7(1), 51–62.* <https://doi.org/10.33369/JOALL.V7I1.12540>
- Hamied, F. A. (2022). English Language Teacher Education Amid Policy Changes in Multilingual Indonesia. *Local Research and Glocal Perspectives in English Language Teaching: Teaching in Changing Times, 433–446.* [https://doi.org/10.1007/978-981-19-6458-9\\_27](https://doi.org/10.1007/978-981-19-6458-9_27)
- Heryati, E., Ratnengsih, E., & Faatinisa, E. (2019). Indonesian Perspectives on Inclusion: Teachers, Parents, and Students Perspective. *Journal of ICSAR, 3(2), 9–15.* <https://journal2.um.ac.id/index.php/icsar/article/view/7506>
- Kawuryan, S. P., Sayuti, S. A., Aman, & Dwiningrum, S. I. A. (2021). Teachers Quality and Educational Equality Achievements in Indonesia. *International Journal of Instruction, 14(2), 811–830.* <https://doi.org/10.29333/iji.2021.14245a>
- Komariah, A., Wiyono, B. B., Rusdinal, Abdullah, Z., & Kurniady, D. A. (2023). Developing an Educational and Cognitive Competence Model for Future Teacher's for Independent Work – The Case of Indonesia. *International Journal of Instruction, 16(3), 149–170.* <https://e-iji.net/ats/index.php/pub/article/view/74>
- Kusanagi, K. N. (2022). Teacher Professional Development in Indonesia: Issues and Challenges.

- Education in the Asia-Pacific Region*, 69, 67–80. [https://doi.org/10.1007/978-981-19-5928-8\\_4](https://doi.org/10.1007/978-981-19-5928-8_4)
- Latip, A., Robandi, B., Amaliah, A., Khakim, R. R., & Fatonah, N. (2023). Technological Pedagogical Content Knowledge (TPACK) Framework for Science Teachers' Comptences in Facing Global Challenges and Issues: A Narrative Literature Review. *International Journal of Pedagogy and Teacher Education*, 7(1), 45. <https://doi.org/10.20961/ijpte.v0i0.74699>
- Lestari, H., Sopandi, W., Sa'ud, U. S., Musthafa, B., Budimansyah, D., & Sukardi, R. R. (2021). The Impact of Online Mentoring in Implementing RADEC Learning to the Elementary School Teachers' Competence in Training Students' Critical Thinking Skills: A Case Study During COVID-19 Pandemic. *Jurnal Pendidikan IPA Indonesia*, 10(3), 346–356. <https://doi.org/10.15294/JPII.V10I3.28655>
- Misbah, Z., Gulikers, J., Widhiarso, W., & Mulder, M. (2022). Exploring connections between teacher interpersonal behaviour, student motivation and competency level in competence-based learning environments. *Learning Environments Research*, 25(3), 641–661. <https://doi.org/10.1007/S10984-021-09395-6/TABLES/6>
- Mumpuniarti, M., Handoyo, R. R., Pinrupitanza, D. T., & Barotuttaqiyah, D. (2020). TEACHER'S PEDAGOGY COMPETENCE AND CHALLENGES IN IMPLEMENTING INCLUSIVE LEARNING IN SLOW LEARNER. *Jurnal Cakrawala Pendidikan*, 39(1), 217–229. <https://doi.org/10.21831/cp.v39i1.28807>
- Nugraha, R., Haryadi, & Setyaningsih, N. H. (2022). The Effect of Parent Attention and Teacher's Competency on Students Learning Outcomes During Online Learning. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, 6(3), 503–512. <https://doi.org/10.23887/JIPP.V6I3.53413>
- Sherly, Gultom, S., Daryanto, E., & Nasrun. (2022). Management of Continuous Professional Development through Competency-Based Training Model for Junior High School Teachers. *Emerging Science Journal*, 7(1), 190–206. <https://doi.org/10.28991/ESJ-2023-07-01-014>
- Siregar, Z. A. B., & Jarudin. (2024). Evolution of Islamic Education Teachers' Competence in Indonesia. *International Journal of Religion*, 5(4), 48–58. <https://doi.org/10.61707/KM08QC95>
- Suharti, P., Listiana, L., Daesusi, R., Sutarni, S., Rahmaniati, R., Zakaria, Y., & Nagy, E. K. (2024). Advancing Collaborative Competence: Instrumentation Development and Integration Strategies for Effective Learning. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 6(1), 137–155. <https://doi.org/10.23917/IJOLAE.V6I1.23214>
- Sulistiyarini, D., & Sukardi, S. (2016). THE INFLUENCE OF MOTIVATION, LEARNING STYLES, TEACHER LEADERSHIP, AND TEACHING INTENSITY ON STUDENTS' LEANING OUTCOMES. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 23(2), 136–143. <https://doi.org/10.21831/JPTK.V23I2.13181>
- Sutarman, S., & Salleh, R. B. (2023). Strategies for Increasing Teacher Competence and the Quality of Islamic Education Learning at State Middle School 8 Medan. *The International Journal of Education Management and Sociology*, 2(1), 40–49. <https://doi.org/10.58818/IJEMS.V2I1.25>
- Widayati, A., MacCallum, J., & Woods-McConney, A. (2021). Teachers' perceptions of continuing professional development: a study of vocational high school teachers in Indonesia. *Teacher Development*, 25(5), 604–621.

<https://doi.org/10.1080/13664530.2021.1933159>

Yelfianita, Y., S, N., & Irdamurni, I. (2023). Improving Teacher Competence in Supporting the Achievement of Basic Education Goals. *International Journal of Educational Dynamics*, 5(2), 232–242. <https://doi.org/10.24036/IJEDS.V5I2.417>

Zulfakar, Z. (2020). Competence of Teachers as Professional Educators. *International Journal of Multicultural and Multireligious Understanding*, 7(8), 508–516. <https://doi.org/10.18415/IJMMU.V7I8.1960>

