

Analysis of Factors Influencing the Professional Competence of Elementary School Teachers

Iis Indah Kurniasih, Suriswo Suriswo, Hanung Sudibyo

Universitas Pancasakti Tegal

Jl. Halmahera KM. 1, Kec. Tegal Selatan, Kota Tegal, Jawa Tengah

Correspondence: iisindahk@gmail.com

Article received: September 2025, Revision: September 2025, Approval: November 2025

DOI: 10.17977/um025v10i12025p113

Abstract: Teachers' professional competence is a key component in ensuring the quality of learning in schools. Many previous researchers have focused on studies showing that teachers' professional competencies are influenced by various contextual factors, particularly within the school environment where learning takes place. However, previous studies have examined these various variables separately and in isolation. This limitation inevitably creates a gap in understanding regarding the relationships and interconnections among the factors influencing teachers' professional competencies. Research findings have also not been integrated and are still presented in a fragmented manner. This study provides a comprehensive explanation and information regarding the factors influencing the professional competencies of elementary school teachers. The method employed is a Systematic Literature Review (SLR) of five empirical articles published between 2020 and 2026. The five articles were selected because they met the inclusion and exclusion criteria used in the article requirements. The analysis process included the stages of article selection, data extraction, and thematic coding. Thematic coding was performed using open coding, axial coding, and selective coding. Hasil sintesis diperoleh bahwa kompetensi profesional guru sekolah dasar dipengaruhi oleh lima faktor utama, yaitu kepemimpinan kepala sekolah, pengembangan profesional berkelanjutan, budaya sekolah yang kolaboratif dan reflektif, supervisi akademik, dan implementasi kurikulum dan kebijakan pembelajaran. Temuan ini memberikan penekanan bahwa upaya peningkatan kompetensi profesional guru harus dilakukan secara utuh dan memerlukan dukungan ekosistem sekolah secara berkelanjutan untuk meningkatkan mutu pembelajaran. Penelitian selanjutnya dapat menganalisis lebih banyak artikel dengan ruang lingkup yang lebih luas agar hasil penelitian dapat menjelaskan kondisi riil. Pengembangan penelitian dengan model analisis berbeda juga dapat dilakukan untuk menganalisis faktor-faktor yang mempengaruhi

Keywords: teacher professional competence; elementary school; professional development, systematic literature review; elementary school

Teachers' professional competence is a key factor in ensuring the quality of education. The quality of education influences students' academic achievement at the elementary school level (Susiani, Suastra and Arnyana, 2022). Teachers' professional competencies relate to mastery of instructional content, designing and implementing instruction, administering and analyzing assessment results, and ongoing professional development (Nurdiansyah, Erviana and Mohammad, 2023). In the context of elementary school education, efforts to strengthen teachers' professional competencies are a critical need that is closely linked to the quality of the learning process (Wijaya *et al.*, 2023). Guaranteed

learning quality has a positive impact on the successful implementation of education policies at the school level (Amirudin *et al.*, 2024). Numerous studies have been conducted and have shown that teachers' professional competence is influenced by various contextual factors, particularly within the school environment. For example, research findings indicate that school principals' leadership plays a key role as the primary driver of teacher professional development and training (Mthanti and Msiza, 2023; He, Guo and Abazie, 2024). Efforts to enhance teacher professionalism through school principals involve policies, supervision, and the creation of a professional work environment (Amelia *et al.*, 2022). In addition, effective curriculum implementation is also a key factor in determining the direction of planning, implementation, and evaluation in the learning process (Hadi *et al.*, 2023). A collaborative, innovative, and reflective school culture contributes to the creation of a professional learning environment that fosters teacher professionalism (McChesney and Cross, 2023).

A number of previous studies have also examined the factors that influence teachers' professional competence at the elementary school level. These factors include school leadership, academic supervision, curriculum implementation, and school culture (Julia *et al.*, 2020; Sanoto and Prastania, 2022; Farleni *et al.*, 2024; Robandi, Setiawardani and Apriyanto, 2025; Syawitri, 2025). However, these various studies have examined the variables in isolation and separately. As a result, our understanding of the relationships and interconnections among the factors influencing teachers' professional competence remains incomplete and fragmented. Consequently, there is currently no comprehensive overview that fully explains the factors influencing the professional competence of elementary school teachers.

To address this gap, a systematic review of previous research findings is essential. This review aims to comprehensively explain the factors influencing the professional competence of elementary school teachers. The review was conducted through a Systematic Literature Review (SLR) by identifying patterns of findings, research trends, and comparisons of findings across studies. The focus of the study is directed at school principal leadership, curriculum implementation, and school culture as the primary factors most frequently identified in the literature. The results of this literature analysis can provide a strong empirical picture of the dominant factors contributing to the development of teachers' professional competencies.

METHOD

This study employs a Systematic Literature Review (SLR) approach to conduct a comprehensive analysis of the factors influencing the professional competencies of elementary school teachers. The selected methods and approach enable the researcher to systematically, transparently, and reproducibly review and synthesize a variety of research findings (Artanti *et al.*, 2025; Irawan *et al.*, 2026). Therefore, this review can provide a comprehensive overview and understanding of the patterns of empirical findings regarding the factors that influence teachers' professional competence.

The process of identifying literature articles involved collecting a variety of published scientific articles. The publications included were recent ones or those published between 2020 and 2026. The

search process was conducted using a database containing accredited and reputable articles. The database used was Google Scholar, with the assistance of the Publish or Perish software. The identification process began by entering the appropriate keywords: “professional competence,” “elementary school teachers,” and “teacher competence.”. The search also utilized keyword combinations to ensure that the research articles identified explicitly and in writing addressed the factors influencing the professional competence of elementary school teachers.

To ensure the quality and suitability of the articles analyzed, we applied two criteria for screening the articles: inclusion criteria and exclusion criteria. These criteria are fully described in Table 1.

Table 1. Inclusion and exclusion criteria

Components	Inclusion	Exclusion
Research topics	Empirical research using quantitative, qualitative, or mixed-methods approaches	Literature review or similar
Components of the study	Factors Influencing Elementary School Teachers' Professionalism	Does not explain the factors contributing to elementary school teachers' professionalism
Type of journal	Accredited national and international articles	Student final projects or elementary school seminar papers
Year of publication	2020 - 2026	Before 2020

Source: Researcher's data analysis, 2025

The selection and screening of the collected articles were conducted in accordance with the established procedures. The first stage involved screening the titles and abstracts to ensure they aligned with the topic of the synthesis to be conducted. Second, a comprehensive analysis and review of the articles were conducted to assess their alignment with the research focus. This analysis identified five articles that met all criteria and were suitable for further analysis. These five articles were sourced from both national and international journals that had been officially published.

Data extraction was then performed on the five articles by identifying the key information from each article. The results of this identification consisted of brief descriptions of the authors, research methods, and main findings related to the professional competencies of elementary school teachers. Further analysis was conducted through coding based on themes encompassing three stages. These three stages were open coding to identify themes emerging in the five articles, axial coding to group themes based on key factors, and selective coding to identify dominant themes. These themes were then presented in the form of narrative descriptions highlighting cross-article findings. This was done to explain the similarities, differences, and patterns of relationships among the factors that emerged in the five articles.

RESULT AND DISCUSSION

RESULT

The presentation of the data from the article synthesis begins with a summary of the methods identified in the five articles. This data provides an initial overview of the similarities among the five articles and the variations in the methods used. The results of the analysis are presented in Table 2.

Table 2. Summary of the synthesis results

Authors	Method	Findings
(Robandi, Setiawardani and Apriyanto, 2025)	Quantitative	Teachers' professional competence is significantly influenced by access to professional development, school policy support, and institutional leadership. A school environment that supports teachers' ongoing professional development strengthens their mastery of subject matter, pedagogy, and reflective practice.
(Farleni <i>et al.</i> , 2024)	Quantitative	Principal leadership and managerial practices have a positive relationship with teachers' professional competencies. Inconsistencies in guidance and supervision lead to variations in elementary school teachers' mastery of professional competencies.
(Julia <i>et al.</i> , 2020)	Mixed method	The readiness and professional competence of new elementary school teachers are influenced by the quality of pre-service education, early-career mentoring, and school culture. Leadership support and a collaborative environment accelerate teachers' professional adaptation.
(Syawitri, 2025)	Qualitative	The enhancement of elementary school teachers' professional competencies is significantly influenced by school policies, a culture of collaboration, instructional innovation, and teachers' readiness to meet the demands of the 21st century. A lack of a culture of reflection hinders continuous professional development.
(Sanoto and Prastania, 2022)	Qualitative	Academic supervision by school principals has a significant impact on the professional competence of elementary school teachers. Well-planned, ongoing supervision that includes follow-up improves the quality of teachers' lesson planning, implementation, and evaluation.

Source: Researcher's data analysis, 2025

The results in Table 2 show that the methods used in previous studies were relatively diverse, with quantitative methods dominating. This indicates that the studies conducted had diverse focuses and yielded diverse results. The coding process also identified five dominant codes. These five codes represent factors influencing the professional competence of elementary school teachers. The complete list of themes is presented in Table 3.

Table 3. Factors Influencing Teacher Professionalism

Factors	Frequency
Principal Leadership	3
Continuing professional development	3
School culture (collaboration, reflection, and innovation)	2
Academic supervision	1
Implementation of the curriculum and learning policies	1

Source: Researchers' data analysis, 2025

Table 3 presents five themes of factors influencing the professional competence of elementary school teachers. These five factors were identified in the various articles analyzed. The results of the further analysis provide a description of each theme that emerged in the five articles. The complete description of the synthesis results is explained as follows.

The dominant factor identified in the article is the principal's leadership. This factor influences the professional competence of elementary school teachers. The principal's leadership plays a strategic role in determining and formulating policies and teacher development initiatives to create a professional work environment. (Robandi, Setiawardani and Apriyanto, 2025) emphasizes that effective policies by stakeholders directly contribute to improving the professional competence of elementary school teachers. This contribution includes the development of pedagogical skills as well as reflection on the outcomes of teaching practices. (Farleni *et al.*, 2024) also reinforces the previous finding that variations in teachers' professional competencies are correlated with and related to differences in the quality of school principals' leadership. The consistency of school principals in providing guidance and management has an impact on the success of teachers' professional development (Farleni *et al.*, 2024). In addition, (Julia *et al.*, 2020) provides another perspective that reinforces the idea that school principals' leadership serves as a support mechanism for teachers to adapt and strengthen the professional competencies of elementary school teachers.

The sustainability of professional development programs is the next theme that emerges based on the synthesis of the articles. This is because teachers' competencies and professionalism do not develop overnight. Continuous and consistent professional training and development efforts are required. (Robandi, Setiawardani and Apriyanto, 2025) The statement notes that teachers who have full access to structured and relevant professional development programs make a significant contribution to their mastery of instructional content and effective teaching strategies. A similar statement also explains that the professional readiness and competence of elementary school teachers are influenced by the quality of their educational background as well as mentoring activities during the early stages of their careers (Julia *et al.*, 2020). This is reinforced by the explanation that professional development for teachers in the 21st century requires them to possess evolving and sustainable competencies and to be able to adapt to rapid developments in education (Syawitri, 2025).

School culture fundamentally influences teachers' professional competence. Schools that foster a collaborative, innovative, and reflective culture are able to support the development of teachers' professional competence at the elementary school level. (Julia *et al.*, 2020) explains that school culture can foster collaboration and cooperation among teachers to support and strengthen their professional development. This collaboration occurs during the adaptation and competency-building phases early in their careers (Julia *et al.*, 2020). This is further supported by other research indicating that weak collaboration and reflection during teaching practice act as barriers to the improvement of teachers'

professional competence. Teachers who are accustomed to working and carrying out tasks individually tend to engage in minimal self-evaluation and self-improvement efforts, which results in their professional competence failing to develop (Syawitri, 2025). In this context, school culture serves as a social factor that determines the sustainability of teachers' professional development. This is because social factors are inherent, as they are integral to every aspect of teachers' daily activities.

Efforts to enhance teacher professionalism are inextricably linked to regular supervision activities. Academic supervision plays a specific role in influencing the professional competence of school teachers. The mechanisms of guidance and feedback in supervision serve as the basis for teachers to make improvements and engage in self-evaluation. This statement is further emphasized in (Sanoto and Prastania, 2022) that academic supervision, when planned and implemented systematically, makes a significant contribution to improving the quality of learning. Such supervision must, of course, be accompanied by feedback designed to build teachers' professional competencies. Academic supervision serves as a vital and strategic tool for enhancing teachers' professionalism through the provision of constructive feedback. Academic supervision functions as an operational factor focused on the teaching practices carried out by teachers.

The implementation of the curriculum and learning policies is also seen as one of the factors influencing teachers' professional competence. This factor is closely linked to leadership and professional development. As explained in (Robandi, Setiawardani and Apriyanto, 2025) that school policies aligned with learning objectives can enhance teachers' professional competencies. A curriculum developed based on the school's core needs is also a key factor. Another statement adds that the challenges of implementing current education policies are driving teachers to update their competencies. This effort will be more successful if supported and facilitated by the school.

DISCUSSION

A synthesis of five articles indicates that the professional competencies of elementary school teachers depend on a variety of factors. The influencing factors are a combination of structural and cultural factors present in schools. Principal leadership and the sustainability of professional development programs emerged as the most dominant and most frequently discussed factors. These two factors serve as the primary drivers and key resources for efforts to enhance teachers' professional competencies. In addition to these two factors, the presence of an active, collaborative, and reflective school culture also plays a crucial role in the success of teachers' professional competency development. This can also be maximized through the support of well-planned and targeted academic supervision to conduct evaluations and provide feedback based on the learning that has taken place. The consistent implementation of the curriculum and learning policies also contributes to the success of enhancing teachers' professionalism, although this is rarely mentioned in various research reports.

These various findings are supported by several previous studies on similar topics. The research report explains that the role of school principals in enhancing teachers' professional competence needs to be emphasized and fully implemented (Estiani and Hasanah, 2022). Leadership based on the process

of teacher training and professional development can have a significant impact on improving the quality of learning and teacher professionalism (Makuachukwu, 2023). This study is also consistent with the assertion that school principals' policies and supervision promote the improvement of elementary school teachers' professional competence (Atstsauray, Hadiyanto and Supian, 2023).

Furthermore, the findings of this study also support research indicating that a collaborative and reflective school culture can serve as the foundation for the sustainability of teachers' professional development (Bendtsen, Forsman and Björklund, 2022). The school environment should serve as a space for collaboration among teachers, educational innovation, and reflection on teaching practices (Sasson *et al.*, 2022). This will undoubtedly strengthen teachers' professional competencies as a group. Furthermore, similar statements supporting these findings indicate that systematic, targeted, and ongoing academic supervision has a positive impact on teachers' competencies and professionalism (Anggraeni, Kusumaningsih and Soedjono, 2025). This improvement can be observed in various aspects, such as planning, implementation, and evaluation of instruction.

Although these findings support various previous studies, there are certain factors that differ from those identified in prior research. For example, previous studies identified intrinsic motivation and teaching experience as the primary factors driving teachers' professional growth (Belay and Melesse, 2024). However, the findings of this synthesis do not suggest that these factors can exist independently without the structural and cultural support of the school. This indicates that professional competence will develop more effectively when situated within the appropriate school environment and ecosystem.

Based on this comparison, the findings of this review provide theoretical and practical implications that can be used to improve practices aimed at enhancing the professionalism of elementary school teachers. Theoretically, this study offers a more comprehensive perspective that teachers' professional competencies can be enhanced through various dimensions and are influenced by school environmental and cultural factors. These findings serve as a reference for a new conceptual framework in educational research addressing elementary school teacher professionalism and efforts to enhance it. Practically, efforts to improve the professional competencies of elementary school teachers must be carried out using appropriate methods and systems to achieve results aligned with the objectives. The design of continuous professional development programs must address needs and be oriented toward evaluation processes and the provision of constructive feedback.

CONCLUSION AND SUGGESTION

CONCLUSION

This study was conducted to analyze and provide a comprehensive explanation of the factors influencing the professional competencies of elementary school teachers through a synthesis of existing research findings. The results of the study indicate that the professional competencies of elementary school teachers are influenced by a combination of school-related factors, including principal leadership and ongoing professional development. These two factors are also supported by a collaborative school culture, academic supervision, and the consistent implementation of the

curriculum and learning policies. Consequently, schools need to design a sustainable teacher professional development system that is integrated with leadership, supervision, and school culture to ensure that the enhancement of professional competence proceeds optimally.

SUGGESTION

Although these findings make an important contribution from both theoretical and practical perspectives, their implementation still faces several limitations. The number of articles analyzed is relatively limited due to the study's aim to provide a systematic explanation. Therefore, research involving a larger number of articles and a broader scope is needed to describe related research trends more objectively and measurably. It is also important to conduct further research using different analytical models to test the simultaneous relationships among various factors influencing teachers' professional competencies.

REFERENCES

- Amelia, C. et al. (2022) "The Principal's Role as Education Supervisor in Improving Teacher Professionalism," *Nidhomul Haq : Jurnal Manajemen Pendidikan Islam*, 7(1), pp. 144–155. Available at: <https://doi.org/10.31538/ndh.v7i1.2075>.
- Amirudin, J. et al. (2024) "Implementation of Internal Policy Head of Madrasah In Improving The Quality of Learning," *Kharisma: Jurnal Administrasi dan Manajemen Pendidikan*, 3(1), pp. 16–24. Available at: <https://doi.org/10.59373/kharisma.v3i1.34>.
- Anggraeni, L., Kusumaningsih, W. and Soedjono, S. (2025) "The Influence of Academic Supervision and Teacher Professionalism on the Quality of Learning," *Cetta: Jurnal Ilmu Pendidikan*, 8(3), pp. 427–435. Available at: <https://doi.org/10.37329/cetta.v8i3.4375>.
- Artanti, K.P.A.I. et al. (2025) "An Analysis of The Application of The Arcs Model in Physics Learning: A Systematic Review of Studies from 2016-2024," *Jurnal Ilmiah Pendidikan Fisika*, 9(3), pp. 425–435.
- Atstsaury, S., Hadiyanto, H. and Supian, S. (2023) "Principal's Strategy to Improve Teachers Professional Competence," *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 5(1), pp. 1–10. Available at: <https://doi.org/10.31538/munaddhomah.v5i1.775>.
- Belay, S. and Melesse, T. (2024) "Exploring the Link Between Teachers' Motivation for Continuous Professional Development and Professional Learning Communities: A Structural Equation Modeling Approach," *Sage Open*, 14(3). Available at: <https://doi.org/10.1177/21582440241281855>.
- Bendtsen, M., Forsman, L. and Björklund, M. (2022) "Exploring empowering practices for teachers' sustainable continuing professional development," *Educational Research*, 64(1), pp. 60–76. Available at: <https://doi.org/10.1080/00131881.2021.2000338>.
- Estiani, S.W. and Hasanah, E. (2022) "Principal's Leadership Role in Improving Teacher Competence," *Nidhomul Haq : Jurnal Manajemen Pendidikan Islam*, 7(2), pp. 229–241. Available at: <https://doi.org/10.31538/ndh.v7i2.2281>.
- Farleni, F. et al. (2024) "Education Policies for Enhancing Professional Competence in Elementary School Teachers," *Journal of Education Research and Evaluation*, 8(1), pp. 58–66. Available at: <https://doi.org/10.23887/jere.v8i1.68733>.
- Hadi, A. et al. (2023) "New Paradigm of Merdeka Belajar Curriculum in Schools," *AL-ISHLAH: Jurnal Pendidikan*, 15(2), pp. 1497–1510. Available at: <https://doi.org/10.35445/alishlah.v15i2.3126>.
- He, P., Guo, F. and Abazie, G.A. (2024) "School principals' instructional leadership as a predictor of teacher's professional development," *Asian-Pacific Journal of Second and Foreign Language Education*, 9(1), p. 63. Available at: <https://doi.org/10.1186/s40862-024-00290-0>.

- Irawan, I.D.A. *et al.* (2026) "Students' Conceptual Understanding And Difficulties On Static Fluids: A Literature Review," *Jurnal Phi Jurnal Pendidikan Fisika dan Fisika Terapan*, 12(1), pp. 1–8. Available at: <https://doi.org/10.22373/p-jpft.v12i1.30339>.
- Julia, J. *et al.* (2020) "Readiness and competence of new teachers for career as professional teachers in primary schools," *European Journal of Educational Research*, 9(2), pp. 655–673. Available at: <https://doi.org/10.12973/eu-jer.9.2.655>.
- Makuachukwu, S. (2023) "A Study on the Effects of Professional Development on Teacher Leadership Skills," *Journal of Asian Multicultural Research for Educational Study*, 4(2), pp. 24–31. Available at: <https://doi.org/10.47616/jamres.v4i2.405>.
- McChesney, K. and Cross, J. (2023) "How school culture affects teachers' classroom implementation of learning from professional development," *Learning Environments Research*, 26(3), pp. 785–801. Available at: <https://doi.org/10.1007/s10984-023-09454-0>.
- Mthanti, B.J. and Msiza, P. (2023) "The roles of the school principals in the professional development of teachers for 21st century Education," *Cogent Education*, 10(2). Available at: <https://doi.org/10.1080/2331186X.2023.2267934>.
- Nurdiansyah, A., Erviana, V.Y. and Mohammad, N. (2023) "Professional Competence of Teachers on Thematic Learning in Elementary Education," *International Journal of Learning Reformation in Elementary Education*, 2(01), pp. 31–46. Available at: <https://doi.org/10.56741/ijlree.v2i01.109>.
- Robandi, B., Setiawardani, W. and Apriyanto, A. (2025) "Factors Influencing the Pedagogical Competence of Elementary School Teachers in the Digital Era: A Survey Study," *Journal of General Education and Humanities*, 4(2), pp. 561–574. Available at: <https://doi.org/10.58421/gehu.v4i2.421>.
- Sanoto, H. and Prastania, M.S. (2022) "Korelasi Supervisi Kepala Sekolah Terhadap Kompetensi Pedagogik dan Kompetensi Profesional Guru Sekolah Dasar," *JP2SD (Jurnal Pemikiran dan Pengembangan Sekolah Dasar)*, 10(1), pp. 88–95. Available at: <https://doi.org/https://doi.org/10.22219/jp2sd.v10i1.20559>.
- Sasson, I. *et al.* (2022) "Designing new learning environments: An innovative pedagogical perspective," *The Curriculum Journal*, 33(1), pp. 61–81. Available at: <https://doi.org/10.1002/curj.125>.
- Susiani, K., Suastra, I.W. and Arnyana, I.B.P. (2022) "Study of improving the quality of learning in an effort to improve the quality of elementary school education," *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 8(1), p. 37. Available at: <https://doi.org/10.29210/1202221786>.
- Syawitri, D. (2025) "PENGUATAN KOMPETENSI PROFESIONAL GURU SEKOLAH DASAR DI ABAD 21," *PEDASUD : Jurnal Ilmu Pendidikan Guru Sekolah Dasar dan Usia Dini*, 2(1), pp. 13–18.
- Wijaya, C. *et al.* (2023) "Improving the Quality of Education by Developing the Social Competency of Teachers," *AL-ISHLAH: Jurnal Pendidikan*, 15(3). Available at: <https://doi.org/10.35445/alishlah.v15i3.1564>.