

## Analysis of Factors Influencing the Professional Competence of Elementary School Teachers

Iis Indah Kurniasih, Suriswo, Hanung Sudibyo

Universitas Pancasakti

Jl. Halmahera KM. 1, Kota Tegal

Correspondence: [iisindahk@gmail.com](mailto:iisindahk@gmail.com)

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**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. The synthesis results indicate that the professional competence of elementary school teachers is influenced by five main factors: principal leadership, continuous professional development, a collaborative and reflective school culture, academic supervision, and the implementation of curriculum and instructional policies. These findings emphasize that efforts to improve teachers' professional competence must be carried out comprehensively and require sustained support from the school ecosystem in order to enhance the quality of learning. Future research may analyze a larger number of articles with a broader scope so that the findings can more accurately reflect real conditions. The development of research using different analytical models can also be conducted to examine the factors influencing teachers' professional competence in a more comprehensive manner.

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

Teachers' professional competence is a key component that plays a crucial role in ensuring the quality and effectiveness of learning. The quality of learning significantly influences students' learning outcomes at the elementary school level (Susiani, Suastra, & Arnyana, 2022). Teachers' professional competence is related to mastery of subject matter, the ability to design and implement instruction, the capacity to conduct and process assessment results, and engagement in continuous professional development (Nurdiansyah, Erviana, & Mohammad, 2023). Within the context of

elementary education, efforts to strengthen teachers' professional competence are an essential necessity closely associated with the quality of the learning process (Wijaya et al., 2023). Assured learning quality has a positive impact on the successful implementation of educational policies at the school level (Amirudin et al., 2024).

Various studies have shown that teachers' professional competence is influenced by several contextual factors, particularly within the school environment. For instance, research findings indicate that the principal's leadership plays a primary role as a driving force in fostering and training teachers' professionalism (Mthanti & Msiza, 2023; He, Guo, & Abazie, 2024). Efforts to enhance teachers' professionalism through school leadership include policies, academic supervision, and the creation of a professional work climate (Amelia et al., 2022). In addition, effective curriculum implementation is also a crucial factor in determining the direction of planning, implementation, and evaluation within the learning process (Hadi et al., 2023). A collaborative, innovative, and reflective school culture contributes to the establishment of a professional learning environment that supports the improvement of teachers' professionalism (McChesney & Cross, 2023).

Several previous studies have also examined factors influencing teachers' professional competence at the elementary school level. Among the factors identified are principal leadership, academic supervision, curriculum implementation, and school culture (Julia et al., 2020; Sanoto & Prastania, 2022; Farleni et al., 2024; Robandi, Setiawardani, & Apriyanto, 2025; Syawitri, 2025). However, these studies tend to examine these variables partially and separately. As a result, the relationships and interconnections among the various factors influencing teachers' professional competence have not been comprehensively explained and remain fragmented. Consequently, a comprehensive understanding that fully explains the factors influencing the professional competence of elementary school teachers has not yet been established.

To address this gap, a systematic review of findings from previous studies is necessary. This review aims to comprehensively explain the factors influencing the professional competence of elementary school teachers. The review is conducted using a Systematic Literature Review (SLR) approach by identifying patterns of findings, research trends, and comparisons across studies. The focus of the analysis is directed toward principal leadership, curriculum implementation, and school culture as the main factors most frequently identified in the literature. The results of this literature analysis can provide strong empirical insights into the dominant factors that contribute to the development of teachers' professional competence.

## **METHOD**

This study employs a Systematic Literature Review (SLR) approach to conduct a comprehensive analysis of factors influencing the professional competence of elementary school teachers. The selected method and approach enable researchers to review and synthesize various research findings in a systematic, transparent, and replicable manner (Artanti et al., 2025; Irawan et

al., 2026). Therefore, this review can provide a comprehensive overview and deeper understanding of empirical patterns related to the factors influencing teachers' professional competence.

The process of identifying literature articles was carried out by collecting various published scientific articles. The publications selected were recent studies published between 2020 and 2026. The search process was conducted using databases containing accredited and reputable articles. The database utilized in this study was Google Scholar, assisted by the Publish or Perish software. The identification process began by entering relevant keywords, namely "*professional competence*," "*elementary school teachers*," and "*teacher competence*." Searches were also conducted using combinations of these keywords to ensure that the retrieved research articles explicitly addressed factors influencing the professional competence of elementary school teachers.

To ensure the quality and relevance of the articles analyzed, two criteria were applied in the screening process: inclusion criteria and exclusion criteria. A detailed explanation of these criteria is presented in Table 1.

**Table 1. Inclusion and Exclusion Criteria**

<b>Component</b>	<b>Inclusion</b>	<b>Exclusion</b>
Type of Research	Empirical research using quantitative, qualitative, or mixed methods	Literature studies or similar types of research
Study Component	Factors influencing the professional competence of elementary school teachers	Does not explain factors influencing the professional competence of elementary school teachers
Journal Type	Accredited national and international journal articles	Student theses or conference/seminar papers
Year of Publication	2020 - 2026	Before 2020

The stages of article selection and screening were carried out according to predetermined procedures. In the first stage, the titles and abstracts were screened to ensure their relevance to the synthesis topic. In the second stage, a comprehensive analysis and review of the articles were conducted to assess their alignment with the research focus. Through this process, five articles were identified that met all the criteria and were deemed suitable for further analysis. These five articles were sourced from officially published national and international journals.

Subsequently, data extraction was conducted for the five selected articles by identifying the key information from each study. The extracted information included a brief description of the authors, research methods, and main findings related to the professional competence of elementary school teachers. Further analysis was conducted through a coding process based on thematic categories, consisting of three stages. The first stage was open coding, used to identify emerging themes within the five articles. The second stage was axial coding, which grouped the themes into major influencing factors. The final stage was selective coding, aimed at determining the dominant themes that emerged from the analysis. These themes were then presented in the form of a narrative description, highlighting findings across the articles. This process was undertaken to explain the similarities, differences, and patterns of relationships among the factors identified in the five articles.

## RESULTS AND DISCUSSION

### RESULTS

The presentation of data from the article synthesis begins by displaying a summary of the research methods identified in the five articles. This data provides an initial overview of the similarities among the five articles as well as the variations in the methods employed. The results of the analysis are presented in Table 2.

**Table 2. Summary of the Synthesis Results**

Author	Method	Findings
(Robandi, Setiawardani and Apriyanto, 2025)	Quantitative	Teachers' professional competence is significantly influenced by access to professional development, supportive school policies, and institutional leadership. A school environment that supports continuous teacher learning strengthens teachers' 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 competence. Inconsistent guidance and supervision lead to variations in the mastery of professional competence among elementary school teachers.
(Julia <i>et al.</i> , 2020)	Mixed Methods	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	Strengthening the professional competence of elementary school teachers is strongly influenced by school policies, collaborative culture, learning innovation, and teachers' readiness to face the demands of the 21st century. Weak reflective culture hinders continuous professional development.
(Sanoto and Prastania, 2022)	Quantitative	Academic supervision by the principal has a significant influence on the professional competence of elementary school teachers. Well-planned, continuous supervision accompanied by follow-up actions improves the quality of teachers' planning, implementation, and evaluation of instruction.

The results presented in Table 2 indicate that the methods used in previous studies are relatively diverse, with quantitative methods being the most dominant. This suggests that the studies conducted have varied research focuses and have produced diverse findings. The coding process carried out in this study also identified five dominant codes that emerged. These five codes represent the main factors influencing the professional competence of elementary school teachers. The complete themes obtained from the analysis are presented in Table 3.

**Table 3. Factors Influencing Teachers' Professionalism**

Factor	Frequency
Principal Leadership	3
Continuous Professional Development	3
School Culture (Collaboration, Reflection, and Innovation)	2
Academic Supervision	1
Curriculum Implementation and Instructional Policy	1

Table 3 presents five thematic factors influencing the professional competence of elementary school teachers. These five factors were identified across the various articles analyzed. Further analysis provides a description of each theme that emerged in the five articles. A complete description of the synthesis results is explained as follows.

The dominant factor identified in the articles is principal leadership. This factor influences the professional competence of elementary school teachers. The principal's leadership plays a strategic role in determining and formulating policies as well as guiding teachers to create a professional working environment. Robandi, Setiawardani, and Apriyanto (2025) emphasized that effective policies from educational stakeholders directly contribute to improving the professional competence of elementary school teachers. This contribution includes the development of pedagogical abilities as well as reflection on teaching practices. Farleni et al. (2024) also reinforced this statement by indicating that variations in teachers' professional competence are correlated with differences in the quality of principal leadership. The consistency of principals in conducting guidance and management significantly affects the success of teachers' professional development (Farleni et al., 2024). In addition, Julia et al. (2020) provide another perspective, emphasizing that principal leadership serves as a mentoring mechanism to support teachers in adapting and strengthening their professional competence at the elementary school level.

The continuity of professional development programs emerged as the next theme based on the synthesis of the articles. Teachers' competence and professionalism do not develop instantly; instead, they require ongoing training and professional development conducted consistently. Robandi, Setiawardani, and Apriyanto (2025) stated that teachers who have full access to structured and relevant professional development programs demonstrate stronger mastery of subject matter and effective instructional strategies. Similarly, other studies explain that the readiness and professional 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 further supported by the argument that teachers' professional development in the 21st century requires continuously evolving competencies and the ability to adapt to rapid developments in educational practices (Syawitri, 2025).

School culture is another factor that influences teachers' professional competence. Schools that implement 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) explained that school culture can foster collaboration and cooperation among teachers to support and strengthen their professional learning processes. Such collaboration often occurs during the adaptation and competency development phases of teachers' early careers (Julia et al., 2020). This finding is supported by other studies showing that weak collaboration and reflection during instructional practices can hinder the improvement of teachers' professional competence. Teachers who are accustomed to working individually tend to conduct fewer evaluations and self-improvement efforts,

which can result in stagnation in their professional competence (Syawitri, 2025). In this context, school culture functions as a social factor that determines the sustainability of teachers' professional development, as it is closely embedded in teachers' daily professional activities.

Efforts to improve teachers' professionalism are also closely linked to academic supervision conducted periodically. Academic supervision serves as a specific factor influencing the professional competence of teachers. The mechanisms of guidance and feedback within supervision provide a basis for teachers to engage in reflection and improvement. Sanoto and Prastania (2022) emphasized that academic supervision that is systematically planned and implemented contributes significantly to improving the quality of teaching. Supervision must be accompanied by constructive feedback that strengthens teachers' professional competence. In this sense, academic supervision functions as an important and strategic instrument for enhancing teacher professionalism through meaningful feedback. Thus, academic supervision emerges as an operational factor directly oriented toward teaching practices implemented by teachers.

Finally, curriculum implementation and instructional policies also appear as factors influencing teachers' professional competence. This factor is closely related to leadership and professional development. As explained by Robandi, Setiawardani, and Apriyanto (2025), school policies aligned with learning objectives can enhance teachers' professional competence. A curriculum developed based on the specific needs of the school also becomes a determining factor. Other studies add that current challenges in implementing educational policies encourage teachers to update and improve their competencies. These efforts are more successful when supported and facilitated by the school environment.

## **DISCUSSION**

The synthesis of the five articles indicates that the professional competence of elementary school teachers depends on various factors. These influencing factors represent a combination of structural and cultural elements within the school environment. Principal leadership and the continuity of professional development programs emerged as the most dominant and frequently discussed factors. Both factors function as the primary driving forces and foundational resources for improving teachers' professional competence. In addition to these two factors, an active, collaborative, and reflective school culture also plays a crucial role in the successful development of teachers' professional competence. This process can be further strengthened through planned and well-directed academic supervision, which facilitates evaluation and feedback based on instructional practices. The consistent implementation of curriculum and instructional policies also contributes to the improvement of teacher professionalism, although this factor is less frequently reported in research findings.

These findings are supported by several previous studies addressing similar topics. Research reports explain that the role of principal leadership in improving teachers' professional competence

needs to be emphasized and implemented optimally (Estiani & Hasanah, 2022). Leadership that focuses on teacher guidance and professional development processes can significantly influence improvements in learning quality and teacher professionalism (Makuachukwu, 2023). This study is also consistent with findings indicating that principal policies and supervision contribute to enhancing the professional competence of elementary school teachers (Atstsauray, Hadiyanto, & Supian, 2023).

Furthermore, the findings of this study support research indicating that a collaborative and reflective school culture can serve as a foundation for sustainable teacher professional development (Bendtsen, Forsman, & Björklund, 2022). The school environment should function as a space for teacher collaboration, instructional innovation, and reflection on teaching practices (Sasson et al., 2022). Such conditions strengthen teachers' professional competence collectively. In addition, similar findings indicate that systematic, targeted, and continuous academic supervision positively influences teachers' competence and professionalism (Anggraeni, Kusumaningsih, & Soedjono, 2025). These improvements can be observed in various aspects such as lesson planning, instructional implementation, and learning evaluation.

Although these findings support many previous studies, certain differences also emerge compared with earlier research. For example, previous studies identified intrinsic motivation and teaching experience as dominant factors in improving teacher professionalism (Belay & Melesse, 2024). However, the results of this synthesis do not suggest that these factors can operate independently without structural and cultural support from the school environment. This indicates that professional competence develops more effectively when supported by an appropriate school ecosystem and environment.

Based on this comparison, the findings of this review provide both theoretical and practical implications that can be used to improve efforts aimed at enhancing the professionalism of elementary school teachers. Theoretically, this study offers a more comprehensive perspective that teachers' professional competence can be improved through multiple dimensions and is influenced by environmental and cultural factors within the school. These findings may serve as a reference for developing a new conceptual framework in educational research related to teacher professionalism and its development. Practically, efforts to improve the professional competence of elementary school teachers should be implemented through appropriate methods and systematic approaches in order to achieve the intended goals. The design of continuous professional development programs should consider teachers' needs and be oriented toward evaluation processes and constructive feedback.

## **CONCLUSION AND SUGGESTION**

### **CONCLUSION**

This study was conducted to analyze and provide a comprehensive explanation of the factors influencing the professional competence of elementary school teachers through the synthesis of findings from previous research. The results of the study indicate that the professional competence of

elementary school teachers is influenced by the integration of school-related factors, particularly principal leadership and continuous professional development. These two factors are further supported by a collaborative school culture, academic supervision, and the consistent implementation of curriculum and instructional policies. The implication is that schools need to design sustainable teacher professional development systems that are integrated with leadership, supervision, and school culture, so that efforts to improve teachers' professional competence can be implemented optimally.

## SUGGESTION

Although these findings provide important contributions from both theoretical and practical perspectives, several limitations remain in their implementation. The number of articles analyzed is relatively limited, as the study aimed to provide a systematic explanation. Therefore, future research involving a larger number of articles and a broader scope is necessary to explain research trends more objectively and comprehensively. In addition, further studies employing different analytical models to examine the simultaneous relationships among various factors influencing teachers' professional competence are also important to be conducted.

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