

# The Role of Pedagogical Knowledge in Developing Teaching Skills

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Article Info	Abstract
<p><b>Article history:</b> Received: 2026-04-25 Revised: 2026-04-26 Accepted: 2026-05-06</p> <p><b>Keywords:</b> Pedagogical Knowledge, Teaching Skills, Learning Effectiveness, Teacher Competence, Educational Pedagogy</p> <p>This is an open-access article under the CC BY-SA license. Copyright © 2026 by Author. Published by Yayasan Mujtahidin Sajimah Selong (Musa Foundation), Indonesia.</p>	<p><i>This study aims to analyze the role of pedagogical knowledge in developing teachers' teaching skills within the fields of education and pedagogy. The method used is library research by examining various literature sources such as books, scientific journals, and relevant articles. The results show that pedagogical knowledge plays an important role in understanding students' characteristics, designing learning, selecting appropriate strategies and methods, managing the classroom, and conducting learning evaluations. Pedagogical knowledge also directly contributes to the improvement of basic teaching skills, such as explaining, questioning, and providing reinforcement. In addition, there is a positive relationship between pedagogical knowledge and learning effectiveness as well as student learning outcomes. Therefore, mastery of pedagogical knowledge is a key factor in improving teacher professionalism and the quality of learning. Thus, the development of pedagogical competence needs to be carried out continuously through education and training.</i></p>

## INTRODUCTION

Education is a fundamental aspect in developing the quality of human resources. In the educational process, teachers play a central role as the primary implementers of classroom learning activities. Learning success is determined not only by mastery of the subject matter, but also by the teacher's ability to manage learning effectively. Therefore, teaching skills are a crucial component that every teacher must possess. These skills include the ability to open and close lessons, explain material, ask questions, provide reinforcement, and manage a conducive classroom. These skills are the main foundation for creating effective and meaningful learning for students (Situmeang et al., 2025).

Teaching skills cannot develop optimally without the support of adequate pedagogical knowledge. Pedagogical knowledge is a teacher's understanding of how the learning process occurs, including student characteristics, learning theories, learning strategies, and appropriate evaluation techniques. This knowledge serves as the primary foundation for designing and implementing effective learning. In the context of modern education, pedagogical competence is even one of the main indicators of teacher professionalism, directly impacting the quality of learning and student learning outcomes (Sam & Sulastri, 2024).

Keeping pace with the changing times and demands of 21st-century education, teachers are required to continuously improve their competencies, particularly in

pedagogical aspects. The implementation of new curricula, such as the Independent Curriculum, requires teachers to be more adaptive, innovative, and able to utilize technology in learning. The research shows that many teachers still have difficulty understanding and optimally applying pedagogical concepts. This indicates a gap between the pedagogical knowledge they possess and the teaching skills they apply in the classroom (Dewi et al., 2025).

Research also reveals that the level of pedagogical competence of teachers in Indonesia still needs to be improved. Low pedagogical competence can impact the ineffectiveness of the learning process, such as the use of monotonous methods, a lack of variety in learning media, and minimal interaction between teachers and students. This condition can ultimately reduce student learning motivation and impact less than optimal learning outcomes. In the context of prospective teachers, similar problems are still found. Although some education students already have a basic understanding of pedagogy, in practice, many still experience difficulty in implementing innovative and effective learning strategies. This indicates that mastery of pedagogical knowledge has not been fully internalized into real teaching skills in the field. Therefore, more systematic efforts are needed to develop pedagogical knowledge so that it can be optimally implemented in learning practices (Lianandaya et al., 2025).

Improving pedagogical competence through training and ongoing professional development can enhance teachers' ability to manage learning. Teachers with good pedagogical knowledge tend to be better able to create an interactive, communicative, and enjoyable learning environment. This demonstrates that pedagogical knowledge plays a strategic role in developing professional teaching skills that are adaptive to changing times (Setyaningrum et al., 2025)

Based on the above description, it can be concluded that pedagogical knowledge plays a crucial role in developing teachers' teaching skills. However, various issues remain related to the low level of understanding and application of pedagogical knowledge in teaching practice. Therefore, a more in-depth study is needed through literature review to examine various concepts, theories, and previous research findings regarding the role of pedagogical knowledge in developing teaching skills. This research is expected to provide theoretical contributions to the development of educational science and serve as a reference for efforts to improve the quality of teacher competency.

## **METHOD**

This research employed a qualitative approach with a library research method focused on reviewing various scientific literature related to the role of pedagogical knowledge in developing teaching skills. Data sources were obtained from academic books, reputable scientific journals, research articles, and other relevant and up-to-date supporting documents. Data collection was conducted through documentation studies, which involved searching, reading, and identifying important information from various sources related to the concepts of pedagogical knowledge and teaching skills. Data analysis in this study employed content analysis techniques, which involve reducing,

categorizing, and interpreting data to identify patterns and relationships between concepts. Researchers compared various expert perspectives and previous research findings to obtain a comprehensive synthesis regarding the role of pedagogical knowledge in learning practices. Data validity was maintained through source triangulation, which involves comparing information from various credible references to ensure the research results are valid and scientifically accountable.

## RESULTS AND DISCUSSION

### 1. Analysis of the Role of Pedagogical Knowledge in the Development of Teaching Skills

Pedagogical knowledge is one of the main competencies that a teacher must have in carrying out his professional duties in the field of Educational Science and Pedagogy (Daryanto, 2016). Secara umum, pengetahuan pedagogik dapat diartikan sebagai pemahaman guru mengenai proses pembelajaran, yang meliputi bagaimana merancang, melaksanakan, dan mengevaluasi pembelajaran secara efektif sesuai dengan karakteristik peserta didik (Situmeang et al., 2025). Pengetahuan ini tidak hanya bersifat teoritis, tetapi juga praktis, karena menjadi dasar dalam pengambilan keputusan saat proses belajar mengajar berlangsung di dalam kelas.

Pedagogical knowledge plays a crucial role in improving teachers' teaching skills. Teachers with a strong pedagogical understanding tend to be more creative and innovative in delivering material, able to build effective communication, and adapt learning strategies to students' needs (Fakhrudin, 2019). Conversely, limited pedagogical knowledge can cause learning to become monotonous, less engaging, and ineffective in achieving educational goals. Therefore, the development of pedagogical knowledge needs to be carried out continuously through formal education, training, seminars, and reflection on teaching experiences. With a good mastery of pedagogical knowledge, teachers not only act as conveyors of material, but also as facilitators, motivators, and guides in the learning process, thereby creating meaningful learning experiences for students (Mulyasa, 2019).

#### a. Role in Understanding Student Characteristics

Pedagogical knowledge plays a crucial role in helping teachers understand the diverse characteristics of students, including their cognitive abilities, learning styles, and social backgrounds. Each student has different learning needs, requiring teachers to tailor their teaching approaches to be more effective. With a pedagogical understanding, teachers can identify learning styles such as visual, auditory, and kinesthetic, enabling more targeted delivery of material. Furthermore, understanding students' psychological development also helps teachers determine methods appropriate to their age and developmental stage (Mulyasa, 2019).

Teachers' pedagogical competence significantly influences student engagement in learning, as they are able to adapt their approach to student characteristics. This suggests that the better a teacher understands students, the higher their engagement in the learning process. Therefore, pedagogical knowledge is the primary foundation for creating inclusive, adaptive, and student-centered learning (Saefuloh et al., 2024).

#### b. Role in Learning Planning

Pedagogical knowledge plays a crucial role in designing systematic and

focused learning plans. Teachers who understand pedagogical principles are able to formulate clear learning objectives, select relevant materials, and determine methods and media appropriate to students' needs. Good planning will help teachers manage time, anticipate obstacles, and ensure the learning process is effective (Mulyasa, 2019).

Improving pedagogical competence through activities such as peer teaching can significantly enhance teachers' ability to plan learning. This demonstrates that pedagogically based learning planning not only improves the quality of teaching but also enhances teachers' readiness to face various classroom situations. Thus, pedagogical knowledge becomes the primary foundation for creating structured, effective learning that is oriented toward achieving educational goals (Hasanuddin et al., 2024).

c. Role in Selecting Learning Strategies and Methods

Pedagogical knowledge helps teachers choose appropriate learning strategies and methods according to learning objectives and student characteristics. Teachers with a good understanding of pedagogy don't just focus on one method, but are able to combine various approaches, such as discussion, problem-based learning, and cooperative learning. This variety of methods is important for increasing student engagement and motivation (Mulyasa, 2019).

Teachers' teaching skills, including selecting appropriate methods, have a significant impact on student learning outcomes. This suggests that appropriate learning strategies can enhance the effectiveness of the learning process. Thus, pedagogical knowledge enables teachers to create learning that is less monotonous and more interactive, while also developing students' critical and creative thinking skills (Yulianto et al., 2024).

d. Role in Class Management

Classroom management is a crucial aspect of teaching skills, heavily influenced by pedagogical knowledge. Teachers with pedagogical competence are able to create a conducive, orderly, and interactive learning environment. This includes the ability to regulate student behavior, manage learning time, and foster harmonious relationships between teachers and students.

Pedagogical competence is strongly linked to teacher performance, including classroom management. Teachers who are able to manage their classrooms well will create a comfortable learning environment that supports the learning process. Therefore, pedagogical knowledge is a crucial factor in maintaining classroom stability and increasing overall learning effectiveness (Hasanuddin et al., 2024).

e. Role in the Use of Media and Learning Technology

Pedagogical knowledge plays a role in helping teachers select and use learning media and technology effectively. In the digital era, teachers are required to integrate technology into the learning process to improve the quality of instruction. Media such as videos, learning apps, and digital platforms can help students understand material more easily and engagingly.

Digital pedagogical competence can significantly improve learning effectiveness. This demonstrates that technology integration supported by pedagogical knowledge can create more innovative and interactive learning. Thus, teachers act not only as material transmitters but also as facilitators of

technology-based learning (Sam & Sulastri, 2024).

f. Role in Learning Evaluation

Pedagogical knowledge plays a crucial role in designing and implementing effective learning evaluations. Evaluations are used not only to measure student learning outcomes but also to improve the learning process. Teachers with pedagogical knowledge are able to select appropriate evaluation techniques, such as written tests, observations, and performance assessments.

Professional teacher training can improve teaching skills, including in the evaluation aspect of learning. This shows that good evaluation will provide accurate information regarding student development and help teachers improve the quality of learning. Thus, pedagogical knowledge plays a crucial role in creating an objective, sustainable evaluation system that is oriented toward improving student learning outcomes (Patajangan et al., 2025).

## 2. Correlation of Pedagogical Knowledge with Teaching Skills

Pedagogical knowledge is the primary foundation for teachers in understanding the learning process, while teaching skills are the concrete implementation of that knowledge in classroom practice. In other words, the greater a teacher's mastery of pedagogical knowledge, the better their teaching skills in managing learning (Dewi et al., 2025).

a. Contextual Relatedness

The conceptual link between pedagogical knowledge and teaching skills lies in the relationship between theoretical and practical aspects of the learning process. Pedagogical knowledge encompasses teachers' understanding of student characteristics, learning strategies, and evaluation, while teaching skills are the direct implementation of this knowledge in the classroom. In other words, pedagogical knowledge serves as the conceptual foundation that shapes the quality of teachers' teaching skills.

Theoretically, this relationship is linear and mutually supportive, whereby improvements in pedagogical knowledge will be followed by improvements in teaching skills. Research shows a correlation between pedagogical competence and learning implementation, meaning that the better a teacher's pedagogical understanding, the more optimal their learning practices (Latifah, 2024)..

Thus, this conceptual linkage demonstrates that pedagogical knowledge cannot be separated from teaching skills. Both are integral components of a teacher's professional competence, so strengthening the pedagogical aspect will have a direct impact on the quality of teaching practice.

b. Impact on Learning Effectiveness

Pedagogical knowledge has a significant impact on learning effectiveness, particularly in creating a structured, interactive, and student-centered learning process. Teachers with strong pedagogical knowledge are able to design learning that meets student needs, select appropriate methods, and manage the classroom effectively. This directly improves the quality of learning interactions and student engagement.

Recent research shows that pedagogical competence contributes to successful learning implementation and improves the quality of the teaching

and learning process. Teachers with strong pedagogical competence are able to optimize learning strategies, making learning more effective and efficient. (Situmeang et al., 2025). Selain itu, studi lain menunjukkan bahwa kompetensi pedagogik memiliki hubungan positif dengan keberhasilan program pembelajaran dan pencapaian tujuan pendidikan.

Thus, learning effectiveness is greatly influenced by a teacher's level of pedagogical knowledge. The higher the pedagogical competence, the higher the quality of the learning produced. This confirms that pedagogical knowledge is a key factor in creating quality and meaningful learning.

c. Implications for Student Learning Outcomes

Pedagogical knowledge not only impacts the learning process but also has direct implications for student learning outcomes. Teachers with strong pedagogical competence are able to deliver material effectively, provide appropriate guidance, and conduct accurate evaluations. This will enhance students' understanding of the material being studied and, consequently, improve learning outcomes. There is a significant relationship between teachers' pedagogical competence and student learning outcomes. Pedagogical competence has a correlation with learning outcomes with a contribution of 25%, which indicates that pedagogical knowledge has a real influence on student achievement (Dewi et al., 2025). Good pedagogical competence can improve the quality of learning, thus impacting the achievement of optimal learning outcomes.

Therefore, pedagogical knowledge has crucial implications for student learning success. Improving teachers' pedagogical competence will contribute to improving the overall quality of education, as student learning outcomes are the primary indicator of the success of the learning process (Patajangan et al., 2025).

## CONCLUSION

The conclusion from the discussion of the role of pedagogical knowledge in teaching skills indicates that pedagogical knowledge is the main foundation in developing the professional quality of teachers in the field of Education and Pedagogy. This knowledge serves as a conceptual basis that enables teachers to understand student characteristics, design systematic learning, choose appropriate strategies and methods, manage classes effectively, utilize media and technology, and conduct comprehensive learning evaluations. All of these aspects directly contribute to the development of teaching skills. Teaching skills are essentially the concrete implementation of pedagogical knowledge in learning practices. Teachers who have good pedagogical mastery tend to be more capable of creating interactive, innovative, and student-centered learning. Conversely, limitations in pedagogical knowledge will impact the low quality of teaching skills, resulting in learning that is less effective and less optimal in achieving educational goals. The greater a teacher's pedagogical knowledge, the higher their teaching skills. Therefore, developing pedagogical competence through education, training, and continuous teaching experience is a strategic step in improving the quality of learning and student learning outcomes.



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