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A theory-synthesized character pedagogical content knowledge (C-PCK) model for integrating character education into pre-service teachers' microteaching

Bangun Bangun^{*)}, Eka Putri Saptari Wulan, Tumpal Richardo Sirait
HKBP Nommensen University, Indonesia

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ABSTRACT

This study develops a Character Pedagogical Content Knowledge (C-PCK) model by integrating Shulman's Pedagogical Content Knowledge theory with Lickona's Character Education framework to strengthen character integration in pre-service teachers' microteaching. A qualitative library research design employing theory synthesis was conducted through systematic literature collection, critical review, comparative analysis, and conceptual integration of studies on PCK, microteaching, teacher competence, and character education. The proposed C-PCK model extends conventional PCK by incorporating moral awareness, ethical decision-making, value internalization, and professional role modeling into pedagogical competence, enabling character integration across instructional planning, implementation, reflection, and assessment. C-PCK provides a comprehensive theoretical framework for redesigning microteaching curricula, fostering pedagogical expertise alongside character-based professionalism to prepare prospective teachers as competent, ethical, and reflective educators.



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Corresponding Author:

Bangun Bangun,
HKBP Nommensen University,
Email: bangun@uhn.ac.id

Introduction

Teacher professional development has become a strategic priority in global education as teachers are expected not only to master pedagogical and disciplinary knowledge but also to cultivate ethical judgment, social responsibility, and character that support sustainable learning in the twenty-first century. International frameworks such as UNESCO's Education for Sustainable Development and the OECD Learning Compass 2030 emphasize that future teachers must be prepared to facilitate holistic learning by integrating cognitive, socio-emotional, and moral competencies into classroom practice (OECD, 2023; UNESCO, 2021). However, despite these global expectations, teacher education curricula in many countries, including Indonesia, continue to assess prospective teachers predominantly through instructional competence, with limited emphasis on character integration during professional preparation. This discrepancy is particularly evident in microteaching courses, where assessment remains largely focused on lesson planning, classroom management, instructional delivery, and evaluation skills, while ethical reflection, value internalization, and professional character receive relatively little systematic attention.

Microteaching is widely recognized as an effective approach for developing prospective teachers' pedagogical competence because it provides structured opportunities to practice teaching in simulated classroom settings. Previous studies consistently demonstrate its contribution to improving instructional skills, teaching confidence, classroom communication, and professional readiness (Kroegeer et al., 2022; Ramadhanti & Yanda, 2025). Nevertheless, empirical evidence also indicates that existing microteaching practices remain predominantly skill-oriented. Ambarini et al. (2025); Ocsis et al., (2024) found that microteaching assessment focuses primarily on instructional performance without explicitly evaluating teachers' ethical reasoning or character-based pedagogical decisions. Similarly, Putra et al. (2025) reported that character values are generally treated as implicit learning outcomes rather than intentionally designed competencies within microteaching activities. Consequently, prospective teachers may demonstrate effective teaching performance while lacking opportunities to develop professional identity, moral awareness, and value-based instructional practices.

This situation suggests that the limitation of current microteaching practices does not merely stem from instructional implementation but also from the conceptual framework underlying teacher preparation. Shulman's Pedagogical Content Knowledge (PCK) theory (1986, 1987) has long provided the foundation for understanding effective teaching as the integration of content knowledge and pedagogical knowledge. Although PCK successfully explains how teachers transform subject matter into meaningful learning experiences, it pays limited attention to the moral and character dimensions that increasingly define teacher professionalism in contemporary education. As a result, pedagogical competence is frequently interpreted as instructional expertise rather than as the integration of knowledge, values, and ethical responsibility.

Conversely, Lickona's Character Education theory (1991) conceptualizes effective education as the integration of moral knowing, moral feeling, and moral action, emphasizing that teachers function not only as instructors but also as moral role models. Recent studies further demonstrate that successful character education depends largely on teachers' ability to embed values within everyday instructional interactions rather than through isolated character programs (Wulandari et al., 2025; Rifaudin, 2025). Conceptually, this perspective complements PCK because pedagogical decisions inevitably involve value judgments regarding instructional goals, classroom interactions, assessment practices, and professional conduct. Therefore, pedagogical competence and character education should not be viewed as separate domains but as mutually reinforcing dimensions of teacher professionalism.

Although studies on PCK and character education have developed extensively, they largely evolve independently. Research on PCK primarily investigates instructional knowledge, pedagogical reasoning, and content transformation, whereas character education research focuses on value formation, school culture, and moral development. Very few studies attempt to integrate these perspectives into a unified framework for preparing prospective teachers, particularly within microteaching contexts. Consequently, an important theoretical gap remains regarding how pedagogical competence and character development can be simultaneously cultivated through structured teaching practice. Addressing this gap requires a conceptual model that positions character not as an additional educational objective but as an inherent component of pedagogical competence itself.

Based on this research gap, the present study develops the Character Pedagogical Content Knowledge (C-PCK) model through the synthesis of Shulman's PCK theory and Lickona's Character Education theory. Unlike conventional PCK, the proposed model explicitly integrates moral awareness, ethical decision-making, value internalization, and professional role modelling into pedagogical reasoning and instructional practice. The study therefore contributes a new conceptual framework that extends PCK beyond instructional effectiveness toward character-based teacher professionalism. This model is expected to enrich teacher education theory while providing practical guidance for redesigning microteaching curricula to better prepare prospective teachers as competent educators, ethical professionals, and character role models in contemporary education.

Method

This study employed a qualitative design using an integrative literature review combined with conceptual model development. An integrative review was selected because it enables the synthesis of theoretical and empirical literature from diverse sources to generate new conceptual frameworks. This approach is particularly appropriate for developing the Character Pedagogical Content Knowledge (C-PCK) model by integrating Pedagogical Content Knowledge (PCK) theory and Character Education theory within the context of microteaching for pre-service teachers.

The literature review followed four systematic stages: (1) problem identification, (2) literature search and selection, (3) critical analysis and comparison, and (4) conceptual synthesis. The primary sources consisted of Shulman's foundational works on Pedagogical Content Knowledge (*Those Who Understand: Knowledge*

Growth in Teaching and Knowledge and Teaching: Foundations of the New Reform) and Lickona's major works on Character Education (Educating for Character and Character Matters). These sources were complemented by recent peer-reviewed journal articles and scholarly books on microteaching, pedagogical competence, character education, teacher professionalism, and teacher education published within the last decade. Literature was selected based on its relevance to the research objectives, conceptual contribution, and credibility of publication.

The construction of the C-PCK model was conducted through a structured conceptual synthesis. First, the essential components of Shulman's PCK including content knowledge, pedagogical knowledge, pedagogical reasoning, and content transformation were identified. Second, the core dimensions of Lickona's Character Education framework moral knowing, moral feeling, and moral action were systematically analyzed. Third, both theoretical frameworks were compared to identify complementary constructs, conceptual intersections, and areas requiring integration. Finally, these complementary elements were synthesized into a unified conceptual framework that positions character development as an integral component of pedagogical competence. The resulting C-PCK model integrates instructional knowledge, pedagogical reasoning, moral awareness, ethical decision-making, value internalization, and professional role modelling into the microteaching process.

Accordingly, this study is not merely descriptive but constructive, as it produces a theoretically grounded conceptual model that extends the traditional PCK framework. The proposed C-PCK model offers a new perspective on teacher education by providing an integrative foundation for designing microteaching practices that simultaneously develop instructional competence and professional character among pre-service teachers.

Results and Discussions

Reorienting Micro-Teaching in Teacher Professional Development

Micro-teaching is a fundamental component of teacher education, serving as a vehicle for connecting theoretical understanding with pedagogical practice through simplified learning situations. This concept was first developed by Allen and Ryan (1969) as a training approach that allows the complexity of teaching activities to be broken down into specific skills that can be gradually trained through a process of planning, practice, observation, reflection, and feedback. Over time, micro-teaching has become viewed not merely as a means of practicing teaching skills but also as a professional learning space that allows prospective teachers to develop pedagogical abilities, self-reflection, and professional identity before entering actual teaching practice. Recent research shows that structured teaching experiences accompanied by reflection and feedback contribute significantly to improving prospective teachers' pedagogical competence, self-efficacy, and professional readiness to face authentic learning situations (Darling-Hammond et al., 2020; Grossman et al., 2021).

Nevertheless, the practice of micro-teaching in various teacher education institutions still tends to be dominated by a technical skills orientation. The success of microteaching is often measured by the ability to open a lesson, explain the material, ask questions, provide reinforcement, manage the class, and close the lesson effectively. An overly strong focus on these procedural aspects has resulted in the dimensions of reflection, professional character, ethical sensitivity, and adaptive capacity not receiving equal attention. Flores (2020) and Zeichner (2021) point out that modern teacher education still faces challenges in integrating the development of professional identity, moral disposition, and reflective capacity into teacher training programs. As a result, microteaching has the potential to produce prospective teachers who are able to carry out learning procedures effectively, but not necessarily possess the ability to understand classroom complexity, make contextual pedagogical decisions, and develop sustainable professionalism.

This situation demonstrates that teacher professionalism cannot be reduced solely to mastering a set of technical skills. Surahman et al. (2025) emphasize that 21st-century teachers must be viewed as professionals who possess critical, reflective, collaborative, and adaptive thinking skills in the face of rapid social change. In line with this, Mohzana et al. (2026) emphasized that future education requires teachers who are not only competent in teaching but also capable of being agents of social change, builders of human values, and lifelong learners. Thus, teacher professionalism must be understood as a multidimensional construct encompassing knowledge, skills, values, character, professional identity, and reflective ability.

This view has received both support and criticism from various theoretical perspectives. Allen and Ryan (1969) viewed teaching skills training through microteaching as an effective strategy for gradually improving pedagogical competence. However, this technical rationality paradigm was criticized by John Dewey (1933) through the concept of reflective thinking, which asserted that experience does not automatically produce learning but must be accompanied by critical reflection to produce deeper understanding. This thinking was further developed by Schön (1983) through the concept of reflective practice, which emphasizes the importance of reflection-in-action and reflection-on-action as primary mechanisms in professional development. According

to Schön (1983), effective professionals are not only those who are able to apply techniques correctly, but also those who are able to reflect on their actions, understand the context they face, and make continuous adjustments.

This reflective perspective has strong relevance in contemporary teacher education. Cochran-Smith et al. (2020) explain that reflective ability is a core competency that enables teachers to make wise pedagogical decisions in complex learning situations. Therefore, microteaching should not only be a means of practicing teaching skills but also a space for prospective teachers to develop reflective awareness of their learning practices. Shulman (1987) also criticized the technical orientation in teacher education through the concept of Pedagogical Content Knowledge (PCK). According to Shulman, teacher professionalism cannot be built through mastery of teaching skills isolated from scientific content and student characteristics. Professional teachers must be able to integrate mastery of subject matter, pedagogical strategies, and an understanding of student learning needs into a coherent whole. In the context of 21st-century education, the concept of PCK continues to develop and expand through various studies emphasizing the importance of integrating pedagogical knowledge, technology, context, and student characteristics into learning practices (Carlson et al., 2022; Mishra & Koehler, 2023). This perspective demonstrates that teacher competence is not merely technical skills, but rather the ability to transform knowledge into meaningful learning experiences.

From a more critical perspective, Freire (1970) emphasized that education that is too technocratic in orientation has the potential to produce mechanistic and less liberating learning practices. According to Freire, teachers should be positioned as agents of social transformation, possessing critical awareness, dialogical skills, and moral responsibility in developing humanistic learners. This view is increasingly relevant in facing current global challenges marked by the development of digital technology, artificial intelligence, and various social issues that demand education oriented toward humanistic values.

The demands of 21st-century education further reinforce the need to reorient microteaching. Rapid social change, technological developments, and the increasing complexity of student needs require teachers to possess adaptive, creative, collaborative, and reflective competencies. Haq et al. (2026) emphasize that future teachers must be prepared as innovators, learning leaders, and agents of social transformation capable of responding to change sustainably. Similarly, research in the field of character education demonstrates that learning success is determined not only by teachers' pedagogical competence, but also by the quality of character, exemplary behavior, and professional integrity demonstrated in daily learning practices (Kristjánsson, 2020; Berkowitz, 2021; Nucci et al., 2021). Therefore, teacher professionalism in the 21st century can no longer be understood solely within the framework of technical competencies but must encompass reflective capacity, professional character, moral awareness, and a commitment to learner-centered learning.

Based on these developments, a new conceptual framework is needed that reorients microteaching from a technical skills training paradigm to a more reflective, constructivist, and transformative paradigm of teacher professional development. This reorientation is rooted in Dewey and Schön's reflective theory, Shulman's concept of Pedagogical Content Knowledge, and the character education perspective developed by Lickona (1991, 2013). In this perspective, microteaching is no longer understood merely as a simulation for mastering teaching skills, but rather as a professional learning space that allows prospective teachers to simultaneously develop pedagogical competence, reflective ability, moral awareness, professional character, and adaptive capacity. This reorientation serves as the conceptual foundation for the development of Character Pedagogical Content Knowledge (C-PCK), a framework that integrates material mastery, pedagogical competence, character education, and teacher professional identity into a unified whole. Thus, microteaching not only produces prospective teachers who are technically competent, but also able to act ethically, reflectively, innovatively, and transformatively in facing the dynamics of 21st-century education.

An Analysis of Lee S. Shulman's Pedagogical Content Knowledge in the Context of Micro-Teaching

The concept of Pedagogical Content Knowledge (PCK), introduced by Lee S. Shulman, is a significant milestone in teacher education reform because it successfully bridges the dichotomy between mastery of content knowledge and the ability to teach that content (pedagogical knowledge). In his classic article, "Knowledge and Teaching: Foundations of the New Reform," Shulman asserted that a teacher's professional competence is determined not only by the depth of mastery of academic disciplines or pedagogical skills separately, but also by the ability to transform knowledge into a form that students can understand. This perspective broadens the paradigm of teacher education, which previously tended to view content mastery and teaching methods as separate competencies.

In the context of micro-teaching, PCK serves as a conceptual foundation that enables prospective teachers to develop pedagogical thinking skills through a continuous process of planning, practice, evaluation, and reflection. This aligns with research findings in Indonesia, which indicate that micro-teaching plays a crucial

role in strengthening prospective teachers' PCK through guided and reflective practice experiences (Aimah et al., 2020).

Content Transformation as the Foundation of Pedagogical Competence

According to Shulman, the core of Pedagogical Content Knowledge (PCK) lies in the ability to transform content, namely the process of converting academic concepts into representations that are understandable to students through analogies, illustrations, demonstrations, concrete examples, and instructional strategies appropriate to learners' characteristics. This process demonstrates that teaching is not merely transmitting information but restructuring disciplinary knowledge into forms that facilitate students' conceptual understanding. In microteaching, this competence is reflected in prospective teachers' ability to design lesson scenarios, sequence learning activities, select instructional media, and employ appropriate representations to explain abstract concepts. Research in Indonesia also indicates that prospective teachers' content transformation skills continue to require systematic development through repeated teaching practice and structured feedback (Wahyuningtyas et al., 2021; Rapa & Husniati, 2023).

However, within the Character Pedagogical Content Knowledge (C-PCK) framework, content transformation extends beyond cognitive accessibility toward value-oriented pedagogical transformation. While PCK emphasizes how teachers make subject matter understandable, C-PCK emphasizes how teachers make subject matter meaningful while simultaneously cultivating students' character. In this perspective, every instructional representation is expected not only to clarify concepts but also to embed moral values, ethical reasoning, and positive dispositions relevant to students' everyday lives. Consequently, the transformation process incorporates four distinguishing characteristics: (1) contextualization of academic content through authentic moral and social situations; (2) integration of character values such as honesty, responsibility, empathy, and collaboration into instructional explanations and classroom interactions; (3) facilitation of ethical reflection and dialogue that encourages students to examine the moral implications of knowledge; and (4) teacher role modelling, whereby the teacher demonstrates the values being taught through professional attitudes and classroom practices. These characteristics differentiate C-PCK from conventional PCK, which primarily focuses on conceptual understanding and instructional effectiveness.

Shulman's perspective is consistent with Jerome Bruner's constructivist theory in *The Process of Education*, which argues that knowledge should be organized according to learners' developmental stages to promote meaningful learning. Likewise, B.F. Skinner's behavioral approach in *The Technology of Teaching* emphasizes reinforcement and systematic instructional procedures for shaping observable behaviours. Although effective for developing specific competencies, both perspectives provide limited attention to the integration of character formation within pedagogical transformation. Therefore, the contribution of C-PCK is not merely to expand Shulman's concept of content transformation but to reconstruct it by integrating conceptual understanding, character internalization, ethical reflection, and professional role modelling into a unified pedagogical process. Through this reconstruction, microteaching becomes not only a setting for developing instructional competence but also a space for cultivating reflective, ethical, and character-oriented future teachers.

Understanding Student Misconceptions

Another important aspect of Pedagogical Content Knowledge (PCK) is teachers' ability to understand how students learn and to identify the misconceptions and learning difficulties that emerge during instruction. Shulman emphasized that professional teachers must recognize concepts that students frequently misunderstand and develop appropriate pedagogical strategies to address these misconceptions. In microteaching, this competence is cultivated through peer teaching, simulated classroom experiences, and reflective feedback from lecturers and observers, enabling prospective teachers to anticipate conceptual errors and refine their instructional explanations. Research in Indonesia also indicates that many pre-service teachers still encounter difficulties in diagnosing students' misconceptions, highlighting the need for more structured opportunities to develop diagnostic pedagogical skills during microteaching (Safriana, 2019). This perspective is reinforced by Jean Piaget's theory of cognitive development, which explains that conceptual understanding develops progressively through cognitive maturation, and by Lev Vygotsky's concept of the Zone of Proximal Development (ZPD), which emphasizes the role of social interaction in supporting conceptual growth.

However, within the Character Pedagogical Content Knowledge (C-PCK) framework, diagnosing learning difficulties extends beyond identifying conceptual misunderstandings to recognizing moral misconceptions, value conflicts, and character-related learning challenges that may arise during classroom interaction. While PCK primarily focuses on students' cognitive errors, C-PCK requires teachers to identify how students interpret ethical issues, demonstrate responsibility, cooperate with peers, respond to diversity, and apply values within learning contexts. For example, a misconception may not only involve an incorrect scientific concept but also an inappropriate interpretation of honesty in academic work, a lack of empathy during collaborative learning, or limited awareness of ethical responsibilities in solving real-world problems. Consequently, the diagnostic

process in C-PCK encompasses both cognitive understanding and moral interpretation, enabling teachers to design instructional interventions that simultaneously improve conceptual comprehension and foster character development.

This broader diagnostic perspective positions teachers not merely as facilitators of knowledge acquisition but also as educators responsible for guiding students' moral reasoning and value formation. Accordingly, feedback provided during microteaching should evaluate not only the accuracy of instructional explanations but also prospective teachers' ability to recognize character-related learning issues, facilitate ethical dialogue, and create learning experiences that encourage responsibility, empathy, integrity, and reflective decision-making. Through this reconstruction, C-PCK expands the diagnostic dimension of PCK from correcting conceptual misconceptions to supporting the holistic development of students' intellectual, moral, and social competencies.

Pedagogical Reasoning and Action

Another significant contribution of Shulman's work is the Pedagogical Reasoning and Action (PRA) model, which comprises the interconnected stages of comprehension, transformation, instruction, evaluation, reflection, and new comprehension. These stages demonstrate that teaching is an intellectual and reflective process rather than merely the execution of technical procedures. In the comprehension stage, teachers develop a deep understanding of subject matter and students' learning needs. During the transformation stage, they reorganize disciplinary knowledge into pedagogically meaningful forms through appropriate representations, examples, and instructional strategies. The instruction stage involves implementing these pedagogical decisions in classroom practice, whereas evaluation and reflection enable teachers to examine learning outcomes and refine subsequent instructional decisions. Consequently, microteaching functions as a professional learning laboratory in which prospective teachers continuously construct pedagogical competence through repeated cycles of practice and reflection. This model is closely aligned with Donald A. Schön's concept of Reflective Practice, which emphasizes reflection both during and after professional action. Nevertheless, studies in Indonesian teacher education indicate that reflective activities in microteaching remain predominantly focused on technical teaching performance and require more systematic guidance to strengthen prospective teachers' pedagogical reasoning (Situmorang, 2019).

Within the Character Pedagogical Content Knowledge (C-PCK) framework, however, pedagogical reasoning is expanded into pedagogical-moral reasoning, whereby every instructional decision is evaluated not only for its pedagogical effectiveness but also for its ethical and character-forming consequences. In this integrated framework, the comprehension stage includes understanding the moral values and character dispositions embedded within learning content alongside disciplinary concepts (Herlambang, 2021). During the transformation stage, teachers redesign learning experiences that integrate academic concepts with opportunities for developing honesty, responsibility, empathy, collaboration, and respect for diversity. At the instruction stage, teachers enact these values through classroom interactions, ethical communication, and professional role modelling rather than merely delivering content. The evaluation stage therefore assesses both students' conceptual understanding and the development of character-related behaviours, while the reflection stage extends beyond pedagogical improvement to include moral reflection, encouraging prospective teachers to examine whether their instructional decisions have fostered ethical awareness, respectful relationships, and positive character development. Finally, the new comprehension stage represents the reconstruction of both pedagogical knowledge and moral understanding, enabling teachers to make increasingly ethical, reflective, and context-sensitive instructional decisions in future practice.

This integration distinguishes C-PCK from conventional PCK by positioning moral reasoning as an inseparable component of pedagogical reasoning, rather than an additional element implemented after instruction. Accordingly, microteaching is reconceptualized not only as a setting for developing instructional competence but also as a space for cultivating ethical judgment, professional identity, and character-oriented pedagogical decision-making. Through this integrated pedagogical-moral reasoning cycle, prospective teachers learn to balance academic objectives with the broader educational mission of nurturing students' intellectual, moral, and social development.

Reconstruction of Basic Teaching Skills from the Character Pedagogical Content Knowledge Perspective.

The reconstruction of basic teaching skills from the perspective of Character Pedagogical Content Knowledge (C-PCK) shows a shift in the educational paradigm from a technical pedagogical orientation to a transformative pedagogy that integrates mastery of material, learning strategies and character formation simultaneously. In the development of contemporary educational studies, teaching activities are no longer viewed as mechanical, procedural activities, but as complex processes involving the transformation of students' knowledge, values and identities (Friedrichsen et al., 2020; Chan & Hume, 2021). This view strengthens the criticism of the technocratic approach to education that has long been conveyed by Eisner, who emphasized that education should be oriented towards creating meaning and meaningful learning experiences (Eisner, 2002). In line with this, Schwab

views teachers as reflective practitioners who are always dealing with values, context and pedagogical decisions in the learning process (Schwab, 1969). In a more recent context, various character education studies also emphasize that learning is an important space for the internalization of moral and social values (Lickona, 2021; OECD, 2021).

In the C-PCK perspective, the skill of opening learning has undergone reconstruction from just a technique to attract students' attention to a strategy for building emotional, cognitive and moral involvement simultaneously. Kieran Egan emphasized that meaningful learning must involve the imagination and emotional dimensions of students (Egan, 1997), while Jerome Bruner emphasized that narrative has an important role in forming meaning and the structure of human thinking (Bruner, 1986). Modern education studies also show that the initial phase of learning has an important role in building students' emotional involvement and value orientation towards the learning process (Darling-Hammond et al., 2020).

Furthermore, explanation skills within the C-PCK perspective are no longer understood as a process of information transfer, but rather as a process of transforming meaning and values. Schwab emphasized that every learning material always contains a practical dimension related to human life (Schwab, 1969). Therefore, explaining concepts means not only simplifying information but also connecting it to the realities of students' lives. Recent research shows that explanation skills within the PCK framework are closely related to teachers' ability to relate concepts to social contexts and everyday values (Depaepe et al., 2020; Chan & Hume, 2021).

Questioning skills have also expanded in meaning, extending from simply developing critical thinking skills to establishing a dialogical culture that values diverse perspectives. Matthew Lipman, through his concept of a community of inquiry, emphasizes that learning must foster a space for dialogue that encourages students to think reflectively while respecting the views of others (Lipman, 2003). This perspective is reinforced by Emmanuel Levinas, who places respect for the "other" as the ethical foundation of human relations (Levinas, 1969). Recent research has shown that questioning practices in learning play a crucial role in developing higher-order thinking skills while simultaneously fostering an inclusive, dialogic learning climate (Alexander, 2020; Hattie, 2023). Within the C-PCK framework, questioning skills serve not only to elicit academically correct answers but also to foster an empathetic, open, and democratic attitude in the learning process.

The reconstruction of reinforcement skills also demonstrates a shift in orientation from an external reward system to a more humanistic and values-based approach. Alfie Kohn criticized the excessive use of rewards for weakening students' intrinsic motivation (Kohn, 1999), while Carl Rogers emphasized the importance of positive acceptance and appreciation in the learning process (Rogers, 1969). Recent educational studies have shown that reinforcement approaches oriented toward character and social-emotional development are more effective in building students' long-term motivation than solely material rewards (OECD, 2021; Lickona, 2021). From the C-PCK perspective, reinforcement is directed not only at academic achievement but also at effort, integrity, cooperation, and prosocial behavior as part of character development.

In terms of classroom management, there has been a shift from a discipline-oriented orientation to the formation of a learning community based on moral values. Philip W. Jackson introduced the concept of the hidden curriculum, which suggests that value learning occurs through everyday classroom interactions and culture (Jackson, 1968). Etienne Wenger views learning as participation in a community of practice that shapes shared meaning and identity (Wenger, 1998), while Sergiovanni emphasizes that schools must be understood as moral communities built on trust and collective responsibility (Sergiovanni, 1994). In modern studies, classroom management is also linked to the development of social-emotional learning and a positive classroom climate that supports both academic and character development simultaneously (Jones & Kahn, 2021; OECD, 2021). From the C-PCK perspective, the classroom is not only a space for discipline but also a space for character formation through meaningful social interactions.

The final reconstruction occurs in the reflection dimension, which is no longer understood only as a technical evaluation of learning, but as a process of developing teachers' moral and professional awareness. Mezirow emphasizes that deep reflection can result in a transformation of an individual's perspective on experience and reality (Mezirow, 1991), while Brookfield emphasizes the importance of teachers to critically evaluate the assumptions underlying learning practices (Brookfield, 1995). Kolb also explained that reflection is an important part of the experience-based learning cycle (Kolb, 1984). Recent research shows that reflection in micro teaching contributes significantly to the development of PCK and professionalism of prospective teachers, especially in building pedagogical awareness and adaptive abilities in learning (Chan & Hume, 2021; Priyantin et al., 2026). In the C-PCK framework, reflection not only aims to improve methods, but also forms ethical awareness and professional responsibility of teachers.

Conceptually, the reconstruction of basic teaching skills from the C-PCK perspective shows that micro teaching cannot be understood only as teaching skills training, but rather as a space for the formation of teachers'

professional identity. This identity develops through experience, reflection and continuous social interaction in the learning process. Maxine Greene emphasized that true education must be able to raise awareness and humanize human life (Greene, 1995), while Dewey placed experience at the core of the reflective educational process (Dewey, 1938). Thus, micro teaching in the C-PCK perspective not only functions as a means of training teaching skills, but also as a space for transformation of knowledge, values and character that shapes teachers as reflective, humanist and professional educators. To clarify the conceptual relationships among the reconstructed teaching skills, the findings of this study are summarized in the Character Pedagogical Content Knowledge (C-PCK) Reconstruction Model (Figure 1).

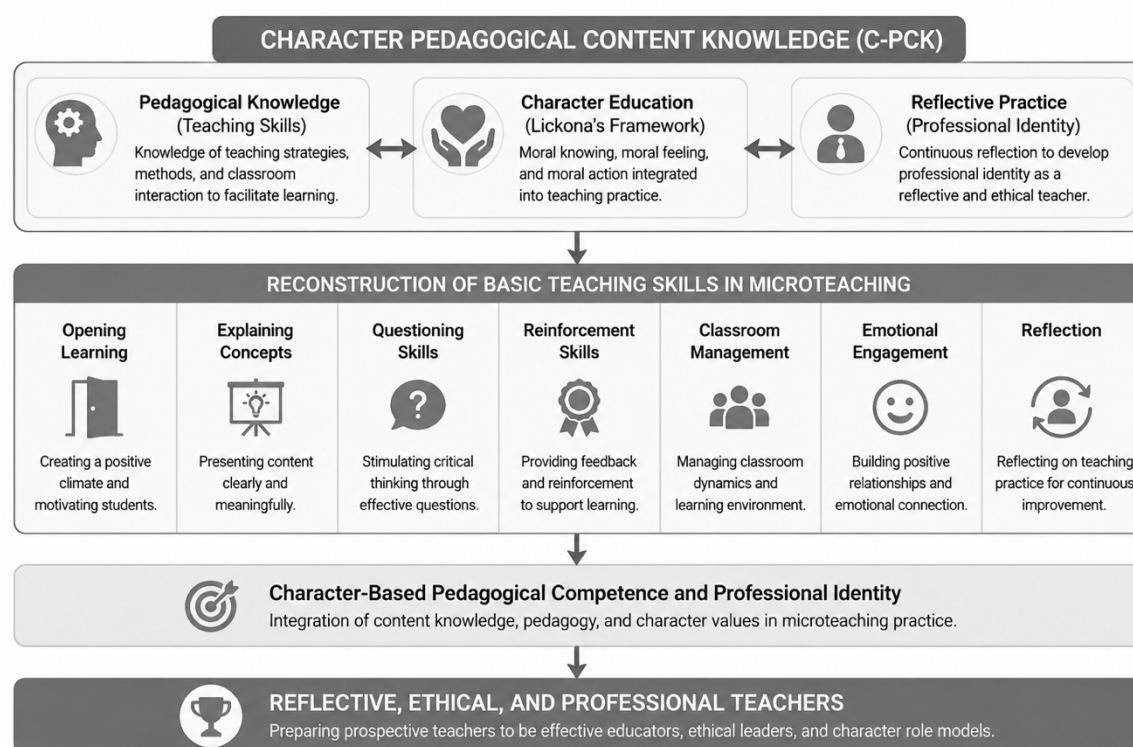


Figure 1. Character Pedagogical Content Knowledge (C-PCK) Reconstruction Model for Basic Teaching Skills in Microteaching

Figure 1 demonstrates that the reconstruction of basic teaching skills within the C-PCK framework follows an integrative process rather than a sequential one. Pedagogical knowledge, character education, and reflective practice jointly influence each teaching skill, resulting in the transformation of conventional microteaching into character-oriented professional learning. The reconstructed competencies collectively contribute to the development of pedagogical competence, moral awareness, ethical decision-making, and professional identity, thereby positioning microteaching as a vehicle for preparing reflective and character-driven teachers rather than merely competent classroom instructors.

Conceptual Contribution of the C-PCK Model to the Development of Teacher Professionalism

The development of teacher professionalism has evolved from viewing teaching competence as the mastery of subject matter and instructional skills toward a more holistic perspective that integrates knowledge, reflection, professional identity, values, and contextual practice. In Indonesia, this shift is reflected in studies that position teachers not merely as knowledge transmitters but as reflective professionals responsible for fostering students' character through meaningful learning experiences (Sutrisno, 2023). Within this paradigm, Pedagogical Content Knowledge (PCK) has become a fundamental framework for understanding how teachers integrate subject matter knowledge with pedagogical strategies (Astuti et al., 2025). However, while PCK provides a strong foundation for instructional decision-making, it primarily focuses on transforming content into teachable knowledge and offers limited guidance for integrating moral reasoning, character formation, and ethical professionalism into teaching practice. Similarly, the Technological Pedagogical Content Knowledge (TPACK) framework expands PCK by incorporating technological competence but remains centered on instructional effectiveness rather than teachers' professional character (Mishra & Koehler, 2006). In the Indonesian context, the four teacher competencies mandated by national policy pedagogical, professional, social, and personality competencies (Kemendikbudristek, 2020) recognize character as an essential domain, yet these competencies

are generally presented as separate constructs without providing an operational framework for integrating them into microteaching or teacher preparation.

The proposed Character Pedagogical Content Knowledge (C-PCK) model addresses these limitations by positioning character not as an additional competency but as an integral dimension of pedagogical reasoning and instructional practice. Unlike PCK, which emphasizes content transformation, and TPACK, which focuses on technology integration, C-PCK explicitly incorporates moral awareness, ethical decision-making, value internalization, and professional role modelling into every stage of teaching, including lesson planning, classroom interaction, reflection, and assessment. Consequently, C-PCK extends existing competency frameworks by connecting instructional expertise with character-based professionalism through a single conceptual structure. This integration enables prospective teachers to develop pedagogical competence and professional identity simultaneously rather than through separate learning experiences.

The practical significance of this model is particularly evident in Indonesian teacher education. Previous studies have shown that microteaching and Teacher Professional Education (PPG) effectively improve instructional competence but continue to emphasize technical teaching performance, while reflective practice and character formation remain insufficiently embedded in learning activities (Suparlan, 2023; Sukamto, 2024). C-PCK therefore provides a conceptual framework for redesigning microteaching, teaching practice, and PPG by integrating character development into instructional planning, observation, reflection, and performance assessment. Compared with existing teacher competency models, the primary contribution of C-PCK lies in its ability to bridge pedagogical competence and professional character within a unified framework, thereby offering a more comprehensive approach to teacher professional development that responds to the demands of twenty-first-century education and current educational reforms in Indonesia.

Conclusions

This study developed the Character Pedagogical Content Knowledge (C-PCK) model through an integrative synthesis of Shulman's Pedagogical Content Knowledge (PCK) theory and Lickona's Character Education theory to address the conceptual gap between pedagogical competence and character development in pre-service teacher education. The findings demonstrate that while conventional PCK primarily emphasizes the integration of pedagogical and content knowledge, it provides limited guidance for embedding character education into teaching practice, whereas character education frameworks have yet to offer a systematic pedagogical structure for instructional implementation. The proposed C-PCK model integrates content knowledge, pedagogical knowledge, pedagogical reasoning, moral awareness, ethical decision-making, value internalization, and professional role modelling into a unified framework that positions character as an integral component of pedagogical competence. This model contributes theoretically by extending the traditional PCK framework beyond instructional effectiveness toward character-based teacher professionalism and provides a more comprehensive conceptual foundation for teacher education. Practically, the C-PCK model offers guidance for redesigning microteaching by integrating character dimensions into instructional planning, teaching practice, reflection, and assessment, thereby supporting teacher education institutions in preparing prospective teachers who are not only pedagogically competent but also capable of demonstrating ethical leadership, professional integrity, and character-based educational practice in response to the demands of twenty-first-century education.

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