



Fostering Self-Awareness Through Core Reflection and Coaching: Enhancing Online Teaching Practices in Pre-Service Teachers

ABSTRACT

As online and blended learning become more embedded within teacher education, helping pre-service teachers reflect on who they are as educators—not just what they do—has become an urgent challenge. This study examines how structured coaching, informed by the Core Reflection Model, supports self-awareness development within a blended practicum setting. Eighteen pre-service computer teachers from a university in northeastern Thailand took part in a three-phase coaching cycle centered on goal setting, simulated teaching, and post-session reflection. Drawing on supervisors' detailed field notes from the coaching protocols, participants' reflective writing, and researchers' observation notes, the analysis used the Core Reflection Model's six-level framework, which spans from observable behaviors to core values and identity. The findings indicate most participants engaged in reflection-on-action after teaching, while some began to demonstrate reflection-in-action in the moment during simulated teaching, suggesting an emerging capacity for real-time instructional adjustment. More than half showed signs of connecting teaching choices to personal values—a shift toward deeper, identity-informed reflection that aligns behavior with professional purpose. Coaching provided a psychologically safe space to process discomfort and rethink teaching purpose. Rather than treating reflection as a routine task, participants experienced it as a process of growth. The study suggests integrating coaching grounded in this model into online practicum supports both pedagogical development and professional self-understanding.

KEYWORDS

core reflection, self-awareness, reflective practice, pre-service teachers, online practicum

INTRODUCTION

The rapid transformation of twenty-first century education redefines what it means to prepare future teachers. With digital technologies now embedded in nearly every dimension of daily life, teacher education must evolve from equipping students with technical skills to supporting their development as reflective, adaptive practitioners. Pre-service teachers are expected to master digital tools and make pedagogically sound decisions in complex and often unpredictable online environments (Koehler, Mishra, Kereluik, Shin, and Graham 2014; Tondeur, van Braak, Ertmer, and Ottenbreit-Leftwich 2017). The global learning crisis brought about by the COVID-19 pandemic further exposed these expectations. According to UNESCO (2021), over 1.6 billion learners across 190 countries experienced educational disruptions due to school closures. Comparable shortfalls in

confidence and pedagogical preparation for online teaching have been reported for pre-service teachers in Thailand and elsewhere (Bozkurt et al. 2020; Sinlapaninman and Pattanachai 2022). These findings echo broader calls to reimagine teacher preparation as an integrated process of cultivating both digital fluency and self-awareness as educators (Darling-Hammond, Flook, Cook-Harvey, Barron, and Osher 2020).

In Thailand, government policy has mandated the use of platforms such as Microsoft Teams and Google Workspace in public schools, especially during periods of remote instruction (Office of the Basic Education Commission 2020). For teacher education programs, particularly those preparing computer education majors, this directive introduces additional pressure to ensure graduates are capable of operating digital platforms as well as designing, managing, and reflecting on their online teaching practices. These demands point to the importance of integrating simulation-based and reflective learning models that mirror authentic classroom challenges while encouraging deeper professional inquiry (Bond, Bedenlier, Marín, and Händel 2021).

Although many teacher education programs have implemented blended or simulation-based learning to address digital preparedness, much of the research focuses on measurable performance outcomes. Researchers have paid far less attention to how pre-service teachers reflect on their values, emotions, and developing identities during teaching—dimensions that are increasingly recognized as central to effective and sustainable teaching (Beauchamp and Thomas 2009). SoTL scholars have argued that meaningful teacher learning is rooted in systematic inquiry into practice, where reflection is not an afterthought but a central part of becoming (Hutchings, Huber, and Ciccone 2011).

This study builds on prior work that examined blended learning activities designed to simulate competency-based classrooms (Sinlapaninman and Pattanachai 2022). In this paper, the focus shifts toward how coaching-based supervision can serve as a developmental space for cultivating reflective awareness and strengthening professional identity among pre-service computer teachers. Through dialogic coaching, structured feedback, and guided self-inquiry, this study examines how participants engage with their teaching behaviors, emotional reactions, and evolving beliefs within the context of online teaching simulation.

Positioned against the backdrop of Thailand's current educational reform efforts, this research prioritizes reflective growth over technical proficiency. It aims to contribute to the scholarship of teaching and learning by exploring how structured reflection—when embedded in a blended practicum—can support pre-service teachers in making sense of their instructional experience, and in doing so, help them become more intentional, resilient, and values-driven educators.

LITERATURE REVIEW

The imperative for digital competence in pre-service teacher preparation

The preparation of pre-service teachers for digital instruction has become a recognized necessity in higher education. This imperative extends beyond mere technical proficiency. For instance, Tondeur et al. (2017), through an extensive systematic review of qualitative evidence on international teacher training curricula, emphasized that teacher education must focus on developing educators' technological pedagogical content knowledge (TPACK), rather than just isolated technical skills. The global shift to remote learning revealed significant gaps in teacher readiness, highlighting the urgency of this preparation. Bozkurt et al. (2020) analyzed rapid transition reports across multiple countries during the COVID-19 pandemic and noted how the emergency move to online teaching exposed systemic deficiencies, including infrastructural, motivational, and pedagogical deficits. These shortfalls underscore the need for enhanced curricula that purposefully integrate reflective and experiential learning. Specifically in Thailand, the Office of the Basic Education Commission (2020)

mandated the deployment of digital platforms for remote teaching in 2020, placing a clear responsibility on universities to ensure pre-service teachers gain proficiency in tools like Microsoft Teams and acquire deeper facility in online pedagogical design and delivery.

The role of SoTL and reflection in core identity development

The scholarship of teaching and learning (SoTL) offers a crucial meta-perspective for understanding teacher development, framing it not as a simple checklist of competencies but as a process of ongoing, evidence-based inquiry into practice. As Hamilton and McCollum (2024) describe in their conceptual article on SoTL rigor, the concept centers on making teaching visible and subjecting it to systematic reflection, grounding personal insight and broader educational improvement in robust evidence. In teacher education, this perspective demands an exploration of how pre-service teachers construct meaning from their instructional experiences, encouraging engagement with their emotions, values, and evolving identities. Armawadjidah Marzuki (2025) suggests, through a narrative inquiry approach focused on a collective culture, that learning to teach involves constructing a professional identity through reflective practice. This work complements Farrell's (2014) advocacy for creating intentional reflective spaces that support open, authentic dialogue about the reality of teaching. Loughran (2002) argued, based on his conceptual analysis of teacher learning, that reflective practice is foundational for educators in order to develop a deep, coherent understanding of their professional identity. Building upon this, Mezirow's (1997) transformative learning model elaborates that critical reflection on disorienting dilemmas or unexpected experiences is a catalyst that leads to fundamental shifts in beliefs, assumptions, and instructional identity.

Operationalizing deep reflection: the core reflection model

To operationalize this deep-level reflection, Korthagen and Vasalos (2005) proposed the Core Reflection Model. This model, which they articulated through a conceptual framework development based on prior research into teacher learning, moves beyond surface-level behavior to emphasize aligning external actions with a teacher's internal motivations and ideals. Their conceptual "onion model" visualizes teacher development across six dimensions ranging from observable environment/behavior to core qualities/mission. They urge educators to move past the outer layers of performance in order to reach the professional identity at the center. They suggest that this layered reflection is most effective when facilitated through coaching, a dialogue that helps teachers recognize inner obstacles and make a direct connection with their deepest professional self.

Experiential learning, simulation, and coaching integration

To effectively build digital and pedagogical competence alongside deep reflection, blended and simulated instructional models have gained prominence in teacher education. A review by Bond, Bedenlier, Marín, and Händel (2021), which mapped the first global online semester across higher education institutions, demonstrated that the rapid shift to online learning enhanced technical fluency and facilitation skills. Furthermore, Kaufman and Ireland (2016), based on case studies involving high-stakes decision-making simulations, highlighted the crucial value of simulations that engage teacher candidates in making choices under authentic classroom pressures, because this environment provides a safe, low-risk space for developing professional judgment and adaptive expertise. Kolb's (1984) framework, which links concrete experience with reflection to foster meaningful learning, inspired this experiential learning. Notably, in Thailand, Sinlapaninman and Pattanachai (2022) found

significant gains in performance for pre-service computer teachers in digital citizenship, instructional design, and classroom management through their blended, simulation-based practicum study.

Coaching and reflective supervision are recognized as potent strategies for cultivating this reflective awareness. van Nieuwerburgh (2018) describes professional coaching as a structured, relational process built on deep listening, purposeful questioning, and responsive feedback, all designed to promote intentional change. Ürün Göker (2021) investigated the impact of coaching on pre-service EFL teachers using a pre-test/post-test experimental design and found that it helped them examine and rework their underlying pedagogical beliefs.

Research gap and foundation in Schön's reflective practice

While blended learning, simulation, reflective supervision, and coaching have each proven effective, there remains an empirical gap concerning their cohesive integration into a single framework that specifically targets deep reflection and identity development. While Sinlapaninman et al. (2022) successfully incorporated simulation into blended learning, they focused on performance, and they did not deeply explore how personalized coaching enhanced reflective outcomes. Similarly, Ürün Göker (2021) highlighted the impact of reflective coaching on EFL teachers' self-efficacy, but within a limited scope outside of digital teaching contexts.

The current study, therefore, uses its simulation (involving pre-service teachers interacting with peers role-playing as online students) as the concrete experience and structurally grounds its coaching in the Core Reflection Model. A key theoretical foundation for this integration is Schön's (2017) influential theory of reflective practice. Based on his observations and case studies of professionals across various fields, he proposed two complementary forms of reflection: reflection-in-action (thinking that occurs during a teaching episode) and reflection-on-action (thinking that occurs after a teaching episode). These reflective modes encourage educators to move from routine, procedural thinking to interpretive engagement, allowing them to make sense of uncertain or complex teaching situations.

In the context of coaching, Schön's ideas elevate the conversation beyond simple technical feedback, positioning supervision as an opportunity for professional meaning-making and the development of teacher identity. The current study adopts Schön's framework because it facilitates the convergence of these elements in a developmentally coherent and pedagogically meaningful way. Drawing on this conceptual foundation, the current study implemented a three-phase coaching structure designed to guide pre-service teachers through a cycle of deep reflection and applied growth, mirroring Schön's reflective cycle in practice.

METHODOLOGY

The research adopted a qualitative case study approach with sequential explanatory elements in order to investigate how coaching-based supervision fosters reflective awareness and emotional-behavioral development in pre-service teachers. The design focused on capturing the nuanced ways in which participants made sense of their teaching experiences, cognitively and emotionally, within the context of online instruction. Central to this approach was the integration of simulated online teaching and structured coaching sessions, which provided a dynamic and dialogic space for participants to engage in professional learning that reflected both personal and pedagogical growth—an orientation that lies at the heart of SoTL.

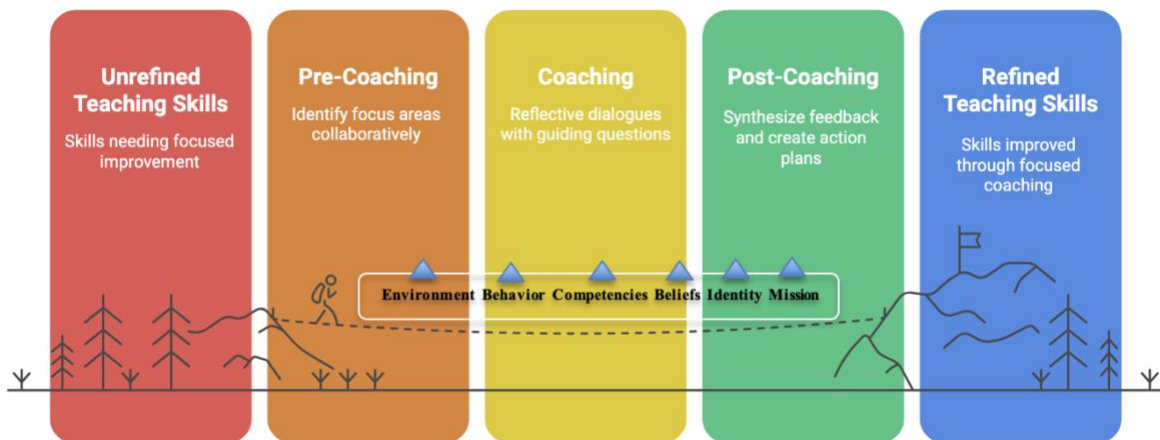
Two interpretive frameworks guided this process. First, the Core Reflection Model (Korthagen and Vasalos 2005) emphasized the alignment between internal dimensions—such as values, beliefs, identity, and mission—and observable teaching actions. This framework supported a layered

exploration of how participants interpreted their roles and responded to instructional challenges in personally meaningful ways.

Complementing this, Schön's (2017) theory of reflective practice provided a lens through which to understand both real-time adjustments (reflection-in-action) and retrospective insights (reflection-on-action). These perspectives were particularly valuable for tracing how participants developed professional judgment and adaptive strategies in response to the fluid demands of online teaching.

Together, these frameworks enabled the analysis of reflections across six core domains—environment, behavior, competencies, beliefs, identity, and mission—offering insights into pedagogical reasoning and the internal processes of pre-service teachers. By focusing on how participants engaged with their instructional experiences in a thoughtful and structured manner, the study aligns with the broader aim of improving teaching practice through evidence-based inquiry situated within authentic educational contexts.

Figure 1. Self-awareness through core reflection and coaching



Participants

A total of 18 fourth-year pre-service teachers enrolled in the computer education program at the Faculty of Education and Educational Innovation at Kalasin University participated in the study. We selected this cohort based on their active engagement in a practicum that involved online teaching—an essential component of their final year coursework. We considered these students suitable for the research as they had already acquired foundational training in pedagogy and instructional technology and were transitioning into professional teaching roles.

We chose participants through cluster random sampling at the classroom level. Inclusion criteria required that they had completed coursework in instructional technology, were currently undertaking the practicum, and provided informed consent to be observed and interviewed during simulated teaching sessions. We excluded those not participating in the practicum or unwilling to engage in coaching-based supervision. All 18 participants completed the full nine-week instructional intervention.

Learning and supervision intervention

The nine-week intervention utilized a blended distance learning model integrating competency-based classroom simulations with a rigorous, structured coaching process. This design

provided a safe yet authentic environment for pre-service teachers to experiment with online pedagogy and engage in reflective professional learning.

Defining the simulated online teaching context

The core intervention activity was Simulated Online Teaching, which was meticulously designed as a high-fidelity role-playing scenario conducted within an authentic live online environment, such as Google Meet or Teams. The term “simulated online teaching” is appropriate because, although the technological platform was genuine, the student-teacher dynamic was temporarily role-played, with the “students” being human peers (fellow pre-service teachers) actively playing the role of school pupils. We chose this model for its critical pedagogical implications: it offered a controlled, low-stakes virtual dynamic, fostering a psychologically safe space for pre-service teachers to engage in risk-taking and the deliberate practice of novel techniques. Crucially, the use of human peers, rather than purely AI-driven scenarios, ensured that instructional challenges retained the necessary unpredictability, emotional complexity, and dynamic interaction essential for developing reflection-in-action—the capacity for real-time instructional adjustment. Furthermore, this controlled, yet authentic, context allowed for a rich and consistent data collection environment, significantly enhancing the comparability and reliability of the reflective dialogues captured.

The coaching-based supervision process

The coaching-based supervision constituted a rigorous, three-phase, dialogic process that served as the primary mechanism for facilitating reflective growth. University supervisors who were faculty members with specialized expertise in educational technology and reflective models facilitated these sessions. The methodology of the coaching was intentional: it aimed to foster an exploratory, non-evaluative space, thereby shifting the focus from external, prescriptive evaluation to internal inquiry and meaning-making. We achieved this through a structured protocol that included Pre-Coaching (identifying focus areas), a detailed Coaching Dialogue (employing purposeful questioning rooted in the Core Reflection Model to address cognitive, behavioral, and emotional dimensions), and Post-Coaching (synthesizing insights and developing concrete action plans). This consistent application ensured that reflection moved beyond superficial description to explore the deeper levels of personal beliefs, identity, and professional mission. As a fundamental component of the research design, this structured, dialogic format had profound implications for the study by serving as the primary mechanism for cultivating and documenting the evolution of reflective awareness and subsequent reflective growth, thereby aligning the supervision process with the six layered framework of the Core Reflection Model.

Instruments

This study employed a Structured Coaching Observation Protocol to investigate pre-service teachers’ reflective awareness during instructional coaching. The protocol consisted of 12 open-ended items, categorized into three phases: Pre-Coaching (Item 1):

- A checklist prompt enabling co-identification of focus areas such as instructional strategies, use of online platforms, teaching media, or student assessment methods.
- Coaching (Items 1–6): These items guided real-time reflection, focusing on prior experience, teaching strengths, classroom dynamics, instructional adaptation, and emotional awareness.
- Post-Coaching (Items 7–12): These prompts encouraged synthesis of learning by exploring personal growth, values, identity, and future improvement plans.

It was theoretically grounded in Schön's reflective practice and Korthagen and Vasalos' coaching-based supervision model. To ensure content validity, three experts evaluated each item using the Index of Item-Objective Congruence (IOC). The IOC values ranged from 0.67 to 1.00, indicating strong alignment with the research objectives. Based on expert feedback, we made minor revisions to improve clarity and theoretical coherence.

A pilot test with five pre-service teachers confirmed the protocol's comprehensibility and relevance. The final instrument, developed in Thai, supported rich reflective responses and we deemed it suitable for qualitative analysis using thematic interpretation methods.

Data collection

We collected qualitative data from supervisors' detailed field notes captured in the coaching observation protocols (which documented students' verbal responses during reflective dialogues) and students' reflective writing (as part of the post-coaching protocol). The Online Teaching Competency Assessment Rubric served as a reference point to support descriptive interpretation rather than statistical measurement. These observation protocols and field notes adhered to a structured protocol in order to ensure consistency across cases and enhance reliability.

Data analysis

We conducted thematic analysis following Braun and Clarke's (2006) six-phase framework. Two researchers performed initial open coding independently to identify patterns in reflective awareness, such as recognition of strengths, emotional reactions, pedagogical challenges, and identity-related insights. We then clustered codes into overarching themes and refined them through investigator triangulation. This iterative analysis process allowed for a nuanced understanding of participants' internalized learning trajectories.

Ethical considerations and research integrity

Adherence to rigorous ethical principles informed every phase of this study—from informed consent to anonymized reporting. We treated participants as partners in learning, echoing SoTL values (Felten 2013). Coaching sessions emphasized trust and exploration over evaluation, creating space for honest reflection (Farrell 2014). Grounded in the Core Reflection Model (Korthagen and Vasalos 2005), this approach fostered ethical engagement through authenticity and self-awareness, ensuring the research was both respectful and professionally meaningful.

RESULTS

The findings are presented in two main sections that address the study's primary objectives. The first objective explores how coaching fosters reflective awareness, defined as the initial, deepened realization of the professional self and the themes (such as behavioral habits or emotional responses) that emerged through structured coaching. The second objective analyzes reflective growth—which captures the developmental trajectory and depth of reflection across the six layers of the Core Reflection Model and Schön's reflective types—evident during teaching simulations and coaching. This distinction allows the analysis to move from identifying what participants became aware of (themes) to documenting how deeply and flexibly they could reflect (dimensions and types) as the intervention progressed.

Reflective awareness fostered through coaching-based supervision

This section addresses the first research objective: exploring how coaching-based supervision fosters reflective awareness—the initial, deepened realization of one’s professional self and its emergence through structured coaching. Structured coaching prompts internal insight, emotional recognition, and value-driven transformation. The analysis of reflective dialogues and observation protocols yielded three interrelated themes: Emergent Self-Recognition, Emotional Realization, and Values-Behavior Alignment. Table 1 summarizes the analysis, providing an immediate framework for the detailed discussion that follows.

Table 1. Thematic analysis summary of reflective awareness in pre-service teachers

Theme	Description	Illustrative quote
Emergent self-recognition	Participants identified habitual teaching behaviors that hindered student engagement, such as excessive lecturing or lack of questioning.	“I realized I explain too much instead of letting students try things themselves.”
Emotional realization	Participants became aware of emotional patterns such as nervousness, fear of silence, or discomfort with unfamiliar tools, and they began reframing them constructively.	“I used to panic when students didn’t respond—now I understand they need thinking time.”
Values-behavior alignment	Participants connected their teaching practices with personal values, forming intentions to align classroom actions with their ideal teacher identity.	“I want to become the kind of teacher who guides more than tells. This feedback helped me see how to do that.”

Across the nine-week intervention, participants demonstrated progressive shifts in how they perceived, interpreted, and responded to their own teaching behaviors. The coaching-based supervision, integrated with simulated online teaching, created space for reflection.

The first theme, Emergent Self-Recognition, captured participants’ growing ability to identify instructional habits that limited student engagement. This realization often required guided observation. For instance, one participant admitted, “I realized I explain too much instead of letting students try things themselves.” Moving from delivery to enabling exploration signifies an early stage of noticing the gap between intention and actual practice. Of the 18 participants, 12 (66.7%) demonstrated patterns reflecting this theme, primarily concerning slide overuse, lecture-dominance, and lack of interactive questioning.

The second theme, Emotional Realization, reflected participants’ heightened awareness of their internal emotional landscape while teaching. Feelings of nervousness, discomfort with silence, or anxiety around digital tools surfaced often, with participants examining them in reflective dialogues. A student noted, “I used to panic when students didn’t respond—now I understand they need thinking time.” This reframing transformed silence from a perceived failure into a pedagogical opportunity. 10 participants (55.6%) echoed this theme, connecting emotional responses directly to their perceived competence and classroom presence.

The third theme, Values-Behavior Alignment, was evident in the reflections across various stages, becoming more explicit in later analyses. As participants gained confidence in analyzing their behaviors, they articulated a critical awareness of the underlying values that drove their practice. One shared a critical realization, stating, “I am a teacher who values guiding students rather than simply telling them what to do. The coaching helped me recognize how this value is (or is not) reflected in my actual instruction.” These expressions mark a critical point where reflection focused on coherence

between internal professional values and external teaching behaviors—a process aligned with Korthagen and Vasalos (2005) and Loughran (2002). Eight participants (44.4%) expressed this theme, highlighting a deepening awareness of the link between identity-driven practice and observable competence.

Overall, the findings revealed that coaching-based supervision fostered reflective awareness through structured support that emphasized voice, agency, and dialogic exploration. Participants developed a nuanced understanding of themselves as educators—not just in terms of what they do, but in who they are becoming. This growth unfolded across emotional, behavioral, and ethical dimensions.

Reflective growth through teaching simulation and coaching

This section addresses the second research objective: to analyze the reflective growth—which captures the developmental trajectory and depth of reflection—during teaching simulations and coaching. This analysis was guided by two frameworks: Korthagen and Vasalos' (2005) Core Reflection Model (six dimensions: Environment, Behavior, Competencies, Beliefs, Identity, and Mission) and Schön's (2017) reflection-in-action and reflection-on-action. Thematic analysis of the reflections shows a clear developmental progression, which is summarized in Table 2, offering insights into how reflection deepened across theoretical dimensions.

Table 2. Thematic coding of pre-service teachers' reflective growth

Core reflection dimension	Example raw reflection	Theme	Schön's type	Interpretive justification
Environment	"I realized that I have not yet developed the ability to utilize classroom space effectively to support student engagement."	Emergent self-recognition	Reflection-on-action	External classroom conditions affected student engagement; recognition emerged post-teaching.
Behavior	"My tone was flat and bored students."	Emergent self-recognition	Reflection-on-action	Observed behavior and student response post-instruction.
Competencies	"I felt nervous and afraid of silence while teaching."	Emotional realization	Reflection-in-action	Emotionally aware during teaching; adjusted accordingly.
Beliefs	"I think students should ask more questions."	Values-behavior alignment	Reflection-on-action	Beliefs about learner agency linked to teacher identity.
Identity	"Having a coach helped me see myself more clearly."	Values-behavior alignment	Reflection-on-action	The coach facilitated deep reflection on teaching identity.
Mission	"I want to be an inspirational teacher."	Values-behavior alignment	Reflection-on-action	Connected role with aspirational goals.

Post-teaching reflections revealed that 16 out of 18 participants (88.9%) initially engaged predominantly in reflection-on-action; they analyzed instructional behaviors after teaching. For example, one participant noted, "I realized afterward that I relied too much on lecturing and didn't

give enough room for student interaction.” These retrospective analyses primarily focused on the Behavior and Competencies dimensions.

As participants progressed, 11 of them (61.1%) demonstrated evidence of reflection-in-action, making real-time adjustments during teaching. One noted, “While teaching, I sensed I was losing students’ attention and had to slow down mid-lesson to re-engage them.” Reflecting metacognitive responsiveness centered on Competencies and emotional regulation. 14 participants (77.8%) exhibited Emotional Realization, often linked to performance anxiety. Furthermore, Environmental Awareness emerged in 66.7% of participants, who recognized how external conditions influenced their pedagogical decisions.

Crucially, participants explored deeper layers of identity and values, indicating substantial reflective growth. Ten participants (55.6%) engaged in Identity and Value-Oriented Reflection, signaling a shift in how they viewed their professional selves. One participant remarked, “I kept asking myself—am I just delivering content, or am I building a relationship with my students?” Coaching prompts focused on value clarification often elicited these profound insights. Finally, Mission-Level Reflection appeared in several narratives, indicating a purposeful connection between personal identity and long-term teaching goals, such as: “I want to be the kind of teacher that inspires students, not just gives information.” These multidimensional reflections confirm a developmental trajectory from task-level observation to deep identity and value exploration and validate the potential of coaching-based supervision to foster holistic professional growth.

These multidimensional reflections also demonstrate a developmental trajectory from task-level observation to deep identity and value exploration, validating the potential of coaching-based supervision to foster holistic professional growth. The results consistently support the efficacy of coaching-based supervision in cultivating reflective awareness and professional identity, allowing the analysis to distinguish between reflective awareness (initial realization) and reflective growth (developmental depth). The intervention successfully guided participants through a progression from initial awareness of surface-level behaviors to deep emotional and metacognitive insight. Specifically, the findings affirmed the multidimensional nature of these reflections, revealing insights across all six inner and outer levels of Korthagen and Vasalos’ (2005) Core Reflection Model. The most significant growth took place in identity- and mission-level reflections, where participants connected their teaching choices to core values. This trajectory suggests that coaching is a robust mechanism for deeper, value-oriented teacher formation, providing a strong foundation for the discussion of reflective coaching in online professional learning.

DISCUSSION

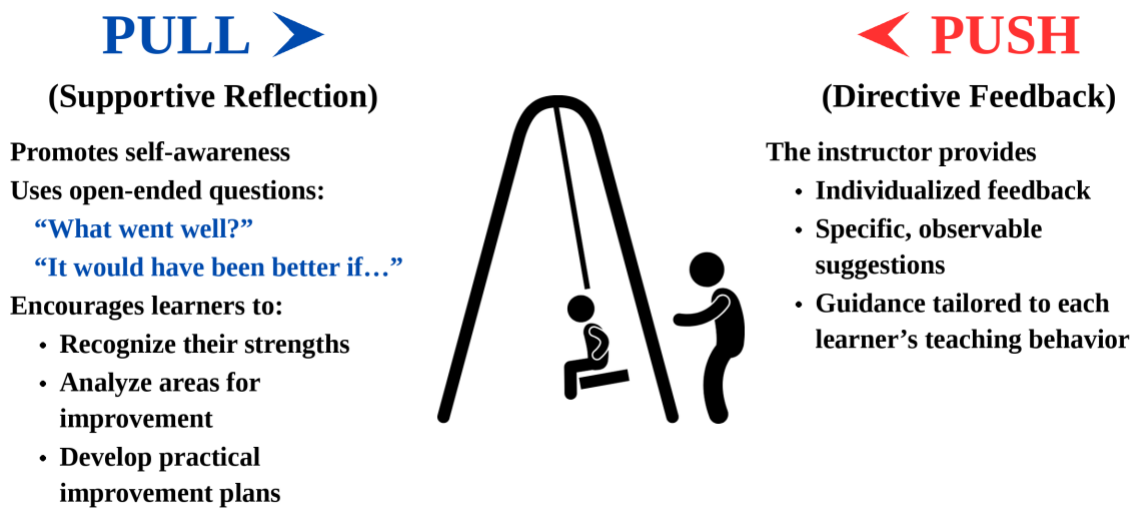
This discussion synthesizes the study’s findings regarding the application of coaching-based reflections in order to enhance self-awareness and professional growth among pre-service teachers in online contexts. It first addresses how the coaching process mediated the shift from technical proficiency to deep identity-focused reflection. Second, it explores the role of dialogic reflection within simulation-based experiences in navigating teaching values and professional identity. Finally, it outlines the implications of these findings for SoTL and teacher preparation policies. Across all points, we contextualize the emergence of these findings using established theoretical and conceptual frameworks from the literature review.

Our findings clearly illustrate that coaching-based supervision served as a catalyst for pre-service teachers to examine their emotional responses, underlying beliefs, and emerging professional identities. This directly addresses a core challenge in teacher education: moving beyond surface-level adjustments to pedagogical change. Instead of offering corrective feedback alone, the coaching

sessions created a necessary space for introspection, helping participants recognize the misalignment between their stated intentions and their actual instructional actions.

Participants viewed these moments of dissonance, such as the overreliance on a lecture format or the discomfort with silence in an online class, as entry points for meaningful reflection, not as failures; this resonates with Loughran's (2002) point that reflection is often rooted in a puzzling or perplexing situation, and with the six levels of reflection in Korthagen and Vasalos' (2005) Core Reflection Model, which range from the outer levels of Environment, Behavior, and Competencies to the inner levels of Beliefs, Identity, and Mission. Participants reported that emotionally charged teaching experiences, when processed through the supportive coaching dialogue, became powerful catalysts for growth. This is consistent with the view that emotion-linked reflection deepens self-understanding and strengthens resilience, especially in novice educators (Bleakley, Woolcott, Yeigh, and Whannell 2020).

Figure 2. The “pull-push” dynamic in coaching-based reflection



The “pull-push” metaphor (Figure 2), where the learner was “pulled” inward through reflective questioning, while the coach “pushed” forward with timely, constructive feedback, captures the dynamic Interaction. This interplay helped learners gain momentum toward deeper pedagogical insight. This capacity for reflection manifested concretely: over 61% of participants demonstrated real-time responsiveness, adapting their instruction as student engagement shifted—a marker of emergent metacognitive agility (Timperley 2011). In doing so, they moved beyond performance-focused reflection toward identity-focused reflection (Beijaard, Meijer, and Verloop 2004), aligning with Schön's (2017) concepts of reflection-in-action and reflection-on-action. The trust-based dialogue inherent in the coaching process proved critical, surfacing implicit beliefs and the professional aspirations (Ürün Göker 2021) necessary for navigating identity development in uncertain digital contexts (Bond et al. 2021; Kidd and Murray 2020). These outcomes reinforce the notion that structured coaching establishes the conditions necessary for robust professional identity development, as it provides psychological safety and authentic engagement (Beauchamp and Thomas 2009).

This study demonstrates how combining authentic simulation with structured coaching catalyzed deep reflective growth and enabled participants to navigate their emerging professional identity and values. While participants initially focused on observable, technical aspects of teaching,

the coaching process deliberately prompted an introspective turn. Participants began to process professional discomfort—anxiety around silence, fear of technological issues—as openings for inquiry instead of defects to correct. These moments of disorientation, where established routines were challenged by the complexities of the online environment, echo the conditions that Mezirow (1997) identified as essential for transformative learning.

Crucially, reflection did not occur in isolation. The interpersonal nature of coaching created a safe, relational space for exploring teaching identities and ethical values. Simulation offered authentic complexity, and coaching made that complexity “thinkable” (Brookfield 2017; Cranton 1996). This enabled participants to move beyond surface-level reflection (i.e., what went wrong) toward deeper, more personal questions: Why do I teach this way? What kind of teacher do I want to become? This progression is consistent with the deeper levels of reflection articulated by Korthagen and Vasalos (2005).

Our findings extend prior work, such as that by Bond et al. (2021) and Gordon (2016), which emphasized simulation’s impact on confidence. Our findings show how coaching transforms the simulation experience into a powerful site for identity formation and ethical deliberation, reinforcing Farrell (2014) call for reflective dialogue. This structured, relational reflection, when embedded within practicum design, aligns with the SoTL vision of teaching as inquiry (Hutchings, Huber, and Ciccone 2011). When novices reflect with guidance, they do more than refine discrete practices; they reshape their understanding of teaching itself.

Implications for the Scholarship of Teaching and Learning

This study contributes significantly to the scholarship of teaching and learning (SoTL) by illustrating how reflective supervision, specifically coaching, in a blended practicum functions as a robust medium for identity formation. While prior studies have established the technical benefits of coaching and simulation (Bond et al. 2021; Ürün Göker 2021), our work explores the relatively underexplored process of deeper meaning-making in teacher preparation. Our findings offer compelling evidence that coaching-centered supervision can effectively bridge the space between performance and professional purpose, inviting teachers to articulate how they teach, as well as why they teach.

In the broader context of SoTL, these insights affirm the need to design teacher education environments that nurture competence and consciousness. Teaching is not solely a matter of methods and tools, but of deeply held values, relational capacity, and self-awareness. Structured coaching, integrated with authentic instructional experience such as simulation, creates a context in which these deeper aspects can flourish. This view aligns with Beauchamp and Thomas (2009), who argue that teacher identity is not a static characteristic, but a dynamic process shaped by reflection, interaction, and experience.

Finally, this study addresses a critical policy-level need, both within Thailand (Office of the Basic Education Commission 2020) and globally (UNESCO 2018): the preparation of educators who are not only digitally fluent but ethically grounded and pedagogically self-aware. In this sense, the reflective coaching model offers a replicable, evidence-informed framework for sustainable teacher development in both online and hybrid contexts.

CONCLUSION

This study underscores the power of coaching-based supervision for helping educators move beyond technical skill development and into the deeper terrain of reflective practice and identity formation. By situating structured coaching within a simulated teaching environment, pre-service

teachers could not only refine instructional behaviors but also engage in dialogic self-inquiry that illuminated their beliefs, emotions, and aspirations as educators. Such processes are essential for preparing teachers to navigate the pedagogical and emotional complexities of online learning environments.

The primary contribution of this study lies in demonstrating how coaching-based supervision, when thoughtfully designed and theoretically grounded, can bridge simulation with reflective practice to foster sustainable teacher development. Rather than treating reflection as an add-on, the coaching framework embedded it into the heart of the learning process, helping participants shift from performance correction to professional meaning-making.

As teacher education programs respond to changing demands in hybrid and online contexts, the findings offer a replicable, evidence-informed model for centering self-awareness and identity formation as core goals of professional learning. This approach aligns with global and national policy directives that call for teachers who are digitally competent, ethically grounded, and reflective.

Future research might explore how identity-level reflection endures over time, especially after the structured coaching ends. Longitudinal studies could examine whether such practices lead to greater instructional resilience and adaptive expertise, or how peer-led and AI-supported coaching models could enhance scalability. This study offers an evidence-based approach to developing digitally fluent teachers who are reflective, resilient, and purpose-driven professionals.

RECOMMENDATIONS

Implications for teacher education practice

To meaningfully support the formation of reflective teaching identities, teacher education programs should integrate structured coaching processes that span before, during, and after practicum experiences. Emphasizing dialogic reflection across these stages is especially crucial in online and blended teaching contexts, where professional identity may be harder to construct.

Simulation activities can serve as a rich context for reflective growth, but their impact is amplified when paired with frameworks like the Core Reflection Model. This combination encourages behavioral adjustment, as well as deeper emotional awareness and values alignment—key factors in sustaining long-term growth for educators.

Directions for future research

Longitudinal designs could offer valuable insight into how identity-informed reflection translates into practice over time. Further research should follow pre-service teachers into their early careers in order to explore whether reflective habits developed during practicum continue to shape their classroom decisions and teaching philosophy.

There is also room to investigate how various coaching formats, such as peer-led circles, small-group mentoring, or AI-supported systems, affect the depth and sustainability of reflective learning. Exploring these models, particularly in contexts with limited resources, may offer practical solutions for scaling reflective supervision while maintaining core pedagogical benefits.

LIMITATIONS

While this study offers valuable insights into how coaching can support the development of reflective identity, there are several limitations. First, the blended practicum model depended on stable digital access, including reliable internet and teaching platforms. A few participants faced connectivity issues, which occasionally disrupted the flow of teaching and post-lesson reflection.

These external factors may have affected the consistency or depth of reflective engagement in some cases.

Second, participants varied in their ability to articulate internal experiences, even with guided reflection prompts. Some found it difficult to express their emotions or to analyze their teaching choices beyond surface-level observations. This suggests that the success of coaching is influenced by its structure as well as individual readiness (both cognitive and emotional) to engage in reflection. Furthermore, the relational dynamics between coach and teacher, while not the focus of this study, may have subtly shaped the quality of reflective dialogue, and they deserve further exploration.

Finally, although the thematic analysis captured nuanced shifts across six reflective dimensions, the study's qualitative nature and small sample size limit the generalizability of these findings. Nonetheless, the strength of qualitative inquiry lies in its capacity to illuminate complex, situated learning processes, which are precisely the kinds of insights that SoTL research values most (Hutchings, Huber, and Ciccone 2011).

ETHICS STATEMENTS

We conducted this research in accordance with ethical standards and received formal approval from the Ethics Review Board at Kalasin University (Approval Code: HS-KSU 001/2565). Prior to participation, all individuals involved in the study provided informed written consent, acknowledging their voluntary engagement and understanding of the study's procedures and objectives.

ACKNOWLEDGMENTS

The authors are grateful to Kalasin University and the Faculty of Education for their continued support throughout the research process. We would also like to express our sincere appreciation to the pre-service teachers who contributed their time and reflections during the virtual practicum. We have no conflicts of interest to declare.

AUTHOR BIOGRAPHY

Unyaparn Sinlapaninman (Thailand) is an assistant professor in learning management innovation at Kalasin University. She earned her PhD in computer education from Rajabhat Maha Sarakham University.

Wannatida Yonwilad (Thailand) is an assistant professor in learning management innovation at Kalasin University. She earned her PhD in research and statistics in cognitive science from Burapha University.

AI DISCLOSURE

During the preparation of this manuscript, the authors used QuillBot, specifically its Grammar Checker and Paraphraser functions, to correct grammatical errors and to improve the clarity and readability of the English text. The tool was applied only to prose the authors had already drafted. It was not used to design the study, to collect or analyse the data, to generate results or interpretations, or to compile the reference list. All conceptualisation, data interpretation, and final revisions were carried out solely by the authors, who reviewed and edited every AI-assisted passage and take full responsibility for the content of this publication.

REFERENCES

- Armawadjudah Marzuki, Andi. 2025. "Investigating Reflective Practice in a Collective Culture." *Asia Pacific Journal of Education*, 1–25. <https://doi.org/10.1080/02188791.2025.2518125>.
- Beauchamp, Catherine, and Lynn Thomas. 2009. "Understanding Teacher Identity: An Overview of Issues in the Literature and Implications for Teacher Education." *Cambridge Journal of Education* 39 (2): 175–89. <https://doi.org/10.1080/03057640902902252>.
- Beijaard, Douwe, Paul C. Meijer, and Nico Verloop. 2004. "Reconsidering Research on Teachers' Professional Identity." *Teaching and Teacher Education* 20 (2): 107–28. <https://doi.org/10.1016/j.tate.2003.07.001>.
- Bleakley, James, Geoff Woolcott, Tony Yeigh, and Robert Whannell. 2020. "Reflecting on Emotions during Teaching: Developing Affective-Reflective Skills in Novice Teachers Using a Novel Critical Moment Protocol." *Australian Journal of Teacher Education* 45 (10): 55–72. <https://doi.org/10.14221/ajte.2020v45n10.4>.
- Bond, Melissa, Svenja Bedenlier, Victoria I. Marín, and Marion Händel. 2021. "Emergency Remote Teaching in Higher Education: Mapping the First Global Online Semester." *International Journal of Educational Technology in Higher Education* 18 (1): 50. <https://doi.org/10.1186/s41239-021-00282-x>.
- Bozkurt, Aras, Insung Jung, Junhong Xiao, Victoria Vladimirschi, Robert Schuwer, Gennady Egorov, Shirley Lambert, Maha Al-Freih, Justin Pete, and D. Olcott Jr. 2020. "A Global Outlook to the Interruption of Education due to the COVID-19 Pandemic." *Asian Journal of Distance Education* 15 (1): 1–126. <https://doi.org/10.5281/zenodo.3878572>.
- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101. <https://doi.org/10.1191/1478088706qp0630a>.
- Brookfield, Stephen D. 2017. *Becoming a Critically Reflective Teacher*. John Wiley and Sons.
- Cranton, Patricia. 1996. *Professional Development as Transformative Learning: New Perspectives for Teachers of Adults*. Jossey-Bass.
- Darling-Hammond, Linda, Lisa Flook, Channa Cook-Harvey, Brigid Barron, and David Osher. 2020. "Implications for Educational Practice of the Science of Learning and Development." *Applied Developmental Science* 24 (2): 97–140. <https://doi.org/10.1080/10888691.2018.1537791>.
- Farrell, Thomas S. C. 2014. *Promoting Teacher Reflection in Second Language Education: A Framework for TESOL Professionals*. Routledge. <https://doi.org/10.4324/9781315775401>.
- Felten, Peter. 2013. "Principles of Good Practice in SoTL." *Teaching & Learning Inquiry* 1 (1): 121–25. <https://doi.org/10.2979/teachlearningqu.1.1.121>.
- Ürün Göker, Mübeher. 2021. "Reflective Coaching: Training for Development of Instructional Skills and Sense of Efficacy of Pre-Service EFL Teachers." *The Journal of Language and Linguistic Studies* 17 (1): 423–47.
- Gordon, Morris. 2016. "Are We Talking the Same Paradigm? Considering Methodological Choices in Health Education Systematic Review." *Medical Teacher* 38 (7): 746–50. <https://doi.org/10.3109/0142159X.2016.1147536>.
- Hamilton, Melanie, and Brett McCollum. 2024. "Moving from 'Good' to 'Great' SoTL: The Importance of Describing Your Research Epistemological and Ontological Traditions in Your SoTL Scholarship." *Teaching & Learning Inquiry* 12: 1–15. <https://doi.org/10.20343/teachlearningqu.12.31>.
- Hutchings, Pat, Mary Taylor Huber, and Anthony Ciccone. 2011. *The Scholarship of Teaching and Learning Reconsidered: Institutional Integration and Impact*. Jossey-Bass.
- Kaufman, David, and Alice Ireland. 2016. "Enhancing Teacher Education with Simulations." *TechTrends: For Leaders in Education and Training* 60 (3): 260–67. <https://doi.org/10.1007/s11528-016-0049-0>.

- Kidd, Warren, and Jean Murray. 2020. "The COVID-19 Pandemic and Its Effects on Teacher Education in England." *European Journal of Teacher Education* 43 (4): 542–58.
<https://doi.org/10.1080/02619768.2020.1820480>.
- Koehler, Matthew J., Punya Mishra, Kristen Kereluik, Tae Sung Shin, and Charles R. Graham. 2014. "The Technological Pedagogical Content Knowledge Framework." In *Handbook of Research on Educational Communications and Technology*, edited by J. Michael Spector, M. David Merrill, Jan Elen, and M. J. Bishop. Springer. https://doi.org/10.1007/978-1-4614-3185-5_9.
- Kolb, David A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall.
- Korthagen, Fred, and Angelo Vasalos. 2005. "Levels in Reflection: Core Reflection as a Means to Enhance Professional Growth." *Teachers and Teaching* 11 (1): 47–71.
<https://doi.org/10.1080/1354060042000337093>.
- Loughran, John J. 2002. "Effective Reflective Practice: In Search of Meaning in Learning about Teaching." *Journal of Teacher Education* 53 (1): 33–43.
<https://doi.org/10.1177/0022487102053001004>.
- Mezirow, Jack. 1997. "Transformative Learning: Theory to Practice." *New Directions for Adult & Continuing Education* 1997 (74): 5–12. <https://doi.org/10.1002/ace.7401>.
- Office of the Basic Education Commission. 2020. *Guidelines for the Implementation of Digital Learning Platforms for Secondary Education*. Ministry of Education, Thailand.
- Schön, Donald A. 2017. *The Reflective Practitioner: How Professionals Think in Action*. Routledge.
- Sinlapaninman, Unyaparn, and Nakintorn Pattanachai. 2022. "Enhancing Pre-Service Computer Teachers' Online Teaching Ability through Blended Distance Learning with Competency-Based Classroom Simulation Activities." *International Online Journal of Education and Teaching* 9 (3): 1145–55. <https://iojet.org/index.php/IOJET/article/view/1678>.
- Timperley, Helen. 2011. *Realizing the Power of Professional Learning*. McGraw-Hill Education.
- Tondeur, Jo, Johan van Braak, Peggy A. Ertmer, and Anne Ottenbreit-Leftwich. 2017. "Understanding the Relationship between Teachers' Pedagogical Beliefs and Technology Use in Education: A Systematic Review of Qualitative Evidence." *Educational Technology Research and Development* 65 (3): 555–75. <https://doi.org/10.1007/s11423-016-9481-2>.
- UNESCO. 2018. *UNESCO ICT Competency Framework for Teachers*. Version 3. UNESCO.
<https://unesdoc.unesco.org/ark:/48223/pf0000265721>.
- UNESCO. 2021. "One Year into COVID-19 Education Disruption: Where Do We Stand?" March 19, 2021.
<https://www.unesco.org/en/articles/one-year-covid-19-education-disruption-where-do-we-stand>.
- van Nieuwerburgh, Christian, ed. 2018. *Coaching in Education: Getting Better Results for Students, Educators and Parents*. Routledge. <https://doi.org/10.4324/9780429473036>.



Copyright for the content of articles published in *Teaching & Learning Inquiry* resides with the authors, and copyright for the publication layout resides with the journal. These copyright holders have agreed that this article should be available on open access under a Creative Commons Attribution License 4.0 International (<https://creativecommons.org/licenses/by-nc/4.0/>). The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited, and to cite *Teaching & Learning Inquiry* as the original place of publication. Readers are free to share these materials—as long as appropriate credit is given, a link to the license is provided, and any changes are indicated.