

UDC [159.942:159.928]:159.91:373.011.3-051

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METACOGNITIVE REFLECTIVE PRACTICES AND THE PSYCHOLOGICAL DEVELOPMENT OF EMOTIONAL INTELLIGENCE IN PRE-SERVICE TEACHERS

The study examines how metacognitive reflective practices support the psychological development of emotional intelligence in pre-service teachers. Using a qualitative, literature-based approach, it synthesizes theoretical models and empirical research to identify how reflective strategies enhance self-awareness, emotional regulation and professional identity. The article highlights the importance of mentorship, scaffolding and mindfulness-based interventions in strengthening emotional and metacognitive competencies. It argues that structured, continuous reflection not only promotes personal growth but also improves classroom interactions and professional readiness. Integrating these practices into teacher education is essential for preparing emotionally resilient and effective educators.

Keywords: metacognitive reflective practices; emotional intelligence; pre-service teachers; teacher education; mindfulness.

Дмитро БІГУНОВ

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МЕТАКОГНІТИВНІ РЕФЛЕКСИВНІ ПРАКТИКИ ТА ПСИХОЛОГІЧНИЙ РОЗВИТОК ЕМОЦІЙНОГО ІНТЕЛЕКТУ У МАЙБУТНІХ УЧИТЕЛІВ

Метою дослідження є вивчення того, як метакогнітивні рефлексивні практики сприяють психологічному розвитку емоційного інтелекту у майбутніх учителів. Досліджуються теоретичні підходи та емпіричні дані, що підтверджують інтеграцію рефлексивних стратегій. Метою є визначення механізмів, через які ці практики підвищують самосвідомість, регуляцію емоцій та формування професійної ідентичності.

Дослідження ґрунтуються на якісному, літературному підході, що передбачає аналіз теоретичних моделей метакогніції, рефлексивної практики та емоційного інтелекту, а також емпіричних досліджень у галузі підготовки вчителів. Результати узагальнюють дані та висвітлюють практичні стратегії розвитку емоційного інтелекту у майбутніх педагогів.

Стаття заповнює наукову прогалину, пов'язуючи метакогнітивні рефлексивні практики безпосередньо з розвитком емоційного інтелекту у майбутніх учителів. У той час як попередні дослідження здебільшого окремо розглядали когнітивну рефлексію або емоційний інтелект, дана робота демонструє, як рефлексивні практики сприяють психологічному та емоційному розвитку. Також підкреслюється роль структурованого

наставництва, скефолдінгу та майндфулнес-інтервенцій у розвитку метакогнітивних та емоційних компетенцій, що формують концептуальну основу для підготовки вчителів.

Метакогнітивні рефлексивні практики є ключовим інструментом розвитку емоційного інтелекту у майбутніх учителів. Вони підвищують самосвідомість, емпатію, емоційну регуляцію та професійну ідентичність, сприяючи як ефективності окремого педагога, так і позитивному середовищу в класі. Структуровані рефлексивні вправи в поєднанні з наставництвом і майндфулнес-інтервенціями пропонують практичні стратегії системного розвитку емоційних та когнітивних компетенцій. Інтеграція таких практик у програми підготовки вчителів є необхідною для підготовки стійких, емоційно компетентних та ефективних педагогів, здатних успішно справлятися зі складними викликами сучасного навчального середовища.

Ключові слова: метакогнітивні рефлексивні практики; емоційний інтелект; майбутні вчителі; підготовка вчителів; майндфулнес.

<https://doi.org/10.31891/PT-2026-1-20>

Стаття надійшла до редакції / Received 21.01.2026

Прийнята до друку / Accepted 24.02.2026

Опубліковано / Published 26.03.2026



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Introduction

In contemporary teacher education developing both cognitive and emotional competencies has become a central concern. Traditional teacher training programmes often focus on pedagogical knowledge, instructional techniques and classroom management skills but the psychological development of pre-service teachers – particularly their emotional intelligence – frequently receives less systematic attention. However, emotional intelligence, defined as the capacity to perceive, understand, regulate and use emotions effectively, is critical for educators navigating complex classroom dynamics [8; 11]. Teachers with high emotional intelligence are better equipped to manage stress, foster positive learning environments, and support student achievement. Despite this, strategies for systematically cultivating emotional intelligence in pre-service teachers remain underexplored in many educational contexts.

Metacognitive reflective practices represent a promising mechanism for fostering emotional intelligence development. Metacognition – the awareness and regulation of one's cognitive processes [6] – enables individuals to critically examine their thoughts, behaviours and emotional responses. Schön's [13] concept of reflective practice operationalizes metacognition by encouraging professionals to analyze experiences deliberately, both during and after action. For pre-service teachers reflective exercises provide structured opportunities to explore emotional reactions to classroom challenges, understand their impact on teaching and adjust

behaviour accordingly. This link between metacognitive reflection and emotional intelligence raises pivotal questions: How can teacher education programmes integrate reflective practices to support emotional intelligence development? Which reflective strategies produce the greatest psychological and professional growth? Addressing these questions is crucial for preparing teachers who are both pedagogically competent and emotionally adaptive.

Analysis of Recent Research and Publications

Research has increasingly investigated the interplay between metacognition, reflective practices, and emotional intelligence in teacher education. Flavell [6] first emphasized the significance of metacognitive awareness for self-regulated learning, noting that individuals capable of monitoring and controlling their thinking are more adaptable in problem-solving. Brown [3] and Schraw & Moshman [14] expanded on this work, demonstrating that metacognitive strategies not only enhance cognitive performance but also support emotional self-regulation.

Reflective practice, introduced by Schön [13], has become foundational in teacher education research. Reflection-in-action, which involves analyzing and adjusting behaviour in real-time, and reflection-on-action, which entails retrospective evaluation, have been shown to promote self-awareness, empathy and emotional regulation. Empirical research indicates that reflective journals, peer coaching and microteaching activities supported by structured feedback significantly contribute to the development of metacognitive awareness and emotional intelligence among pre-service teachers [10; 16].

Recent studies also emphasise the need to better understand the emotional dimensions of teaching. Mindfulness-integrated reflective practices further enhance emotional regulation and resilience among pre-service teachers [9]. Mindfulness-based programmes have been shown to significantly reduce stress and improve emotional regulation in educators [12], and even brief mindfulness interventions can reduce teacher stress and burnout [15]. Fried, Mansfield, and Dobozy introduced an influential conceptual model that clarifies how teacher emotions interact with contextual and cognitive factors, arguing that emotional competence is central to effective teaching [7]. Their work underscores the importance of integrating emotional processes into reflective learning practices.

Despite these contributions, the integrative relationship between reflective practices and emotional intelligence development in pre-service teachers has not been fully explored. Existing studies often examine cognitive reflection or emotional intelligence separately, without systematically analyzing how metacognitive reflection can foster the psychological growth

necessary for emotional intelligence. This gap underscores the necessity of research that explicitly examines the mechanisms through which reflective practices enhance emotional competencies in teacher candidates.

Thus, **this article aims** to explore how metacognitive reflective practices contribute to the psychological development of emotional intelligence in pre-service teachers, providing theoretical foundations, practical applications and implications for teacher education programmes.

Presentation of the Main Material

Metacognition provides the cognitive foundation for emotional intelligence. Flavell [6] distinguishes between metacognitive knowledge (awareness of one's cognitive and emotional tendencies) and metacognitive regulation (the strategies used to control thinking and emotional responses). In the context of teacher education, fostering both aspects allows pre-service teachers to recognize emotional triggers, anticipate potential classroom challenges and implement adaptive strategies. Schraw & Moshman [14] emphasize that metacognitive strategies enhance problem-solving ability, and when applied to emotional contexts, these strategies support self-regulation and interpersonal competence. Developing metacognitive awareness involves training pre-service teachers to monitor their thinking, evaluate their strategies, and adjust responses when necessary. For instance, reflecting on a challenging classroom interaction allows a teacher to identify emotional triggers, evaluate alternative responses, and plan constructive strategies for future situations. This iterative process strengthens both metacognitive skills and emotional intelligence, highlighting the deep interconnection between cognition and emotional development.

Schön [13] defines reflective practice as a deliberate process of analyzing experiences to improve professional performance. Reflection-in-action allows teachers to evaluate their responses in real time, while reflection-on-action involves post-event analysis for long-term learning. Both types of reflection are essential for cultivating emotional intelligence in pre-service teachers.

Practical strategies for reflective practice include:

- *Reflective Journaling*: Pre-service teachers document classroom experiences, evaluate their emotional responses, and plan improvements [10]. Journaling enhances self-awareness and provides a record of emotional intelligence development over time.

- *Peer Discussion and Collaborative Reflection*: Engaging in structured discussions promotes empathy and perspective-taking by exposing teachers to multiple viewpoints.

– *Microteaching with Feedback*: Simulated teaching sessions combined with reflective debriefs allow candidates to practice emotional regulation, social skills, and adaptive teaching strategies.

– *Mindfulness Exercises*: Techniques such as guided meditation and focus exercises improve attention, stress management, and emotional regulation, complementing reflective activities [9]. Mindfulness-based programmes have been shown to significantly reduce stress and enhance emotional regulation in educators [12], and even brief interventions can reduce teacher stress and burnout [15]. These findings reinforce that integrating mindfulness with reflective practices provides a practical and empirically supported method for developing emotional intelligence in pre-service teachers.

Building on cognitive foundations, Bruner's [4] concept of guided learning and scaffolding provides a theoretical lens for understanding how pre-service teachers internalize reflective practices. Scaffolding reflective practices through mentorship and feedback helps pre-service teachers internalize metacognitive strategies and emotional competencies. Guided reflection – supported by mentors or supervisors – allows teacher candidates to gradually master these skills, and as external support decreases, they develop greater autonomy in emotional regulation, metacognitive awareness and professional judgment. For instance, an instructor guiding a teacher candidate through reflection on classroom interactions can progressively reduce support as the student becomes proficient, promoting both independence and emotional self-regulation.

Emotional intelligence encompasses multiple interrelated competencies. Mayer & Salovey [11] outline four core abilities: perceiving emotions, facilitating thought through emotions, understanding emotional meanings and managing emotions effectively. Goleman [8] identifies complementary dimensions: self-awareness, self-regulation, motivation, empathy, and social skills. Bar-On [1] further elaborates that emotional intelligence includes intrapersonal skills, interpersonal skills, stress management, adaptability and general mood competencies.

In classrooms, these skills manifest in the ability to manage stress, resolve conflicts, empathize with students, maintain motivation and create positive learning environments. For example, a teacher who can recognize his/her own frustration during a challenging lesson and respond calmly demonstrates both metacognitive awareness and emotional regulation. High emotional intelligence contributes to greater teaching effectiveness, student engagement, and positive learning environments.

Reflective practices and the development of emotional intelligence align closely with psychosocial development and professional identity

formation. According to Erikson [5], identity formation requires self-exploration, and engaging in structured reflective exercises allows pre-service teachers to examine their values, beliefs, emotions, and classroom interactions, strengthening their professional self-concept and promoting adaptive coping strategies. Guided reflection through mentorship helps teacher candidates progressively develop metacognitive strategies and emotional competencies, ultimately fostering independence and self-regulation. Empirical evidence indicates that pre-service teachers who engage in sustained reflective practices exhibit greater emotional resilience, enhanced interpersonal skills, and improved classroom adaptability, contributing not only to individual efficacy but also to positive classroom climates and student learning [16]. Moreover, teacher identity formation is deeply intertwined with emotional understanding; reflective practices are central to developing a coherent professional identity, which, in turn, supports the cultivation of emotional intelligence [2].

Despite clear benefits, integrating reflective practices in teacher education faces challenges. Some pre-service teachers may resist reflection due to discomfort, inexperience or perceived time constraints. Additionally, the quality of mentorship and feedback significantly affects outcomes. Effective strategies for addressing these challenges include:

- implementing structured reflection frameworks with clearly defined goals;
- providing consistent mentorship and constructive, actionable feedback;
- integrating reflective exercises longitudinally throughout teacher education curricula to ensure continuity of emotional intelligence development.

Long-term engagement ensures that reflective practices and emotional intelligence development are systematic, sustainable and closely linked to practical teaching experiences.

Conclusions

The psychological development of emotional intelligence in pre-service teachers is closely tied to metacognitive reflective practices. These practices cultivate self-awareness, empathy and adaptive emotional regulation, enhancing both professional competence and personal growth. Theoretical frameworks, including those of Flavell, Schön, Bruner and Erikson, provide a robust foundation for understanding the mechanisms underlying this development. Empirical research confirms that reflective exercises such as journaling, peer discussions, microteaching feedback and

mindfulness practices effectively promote emotional intelligence growth and support professional identity formation.

Despite increasing research, the integrative relationship between metacognitive reflective practices and emotional intelligence development in pre-service teachers remains underexplored, highlighting the need for continued investigation. Integrating structured reflective practices into teacher education programmes is a critical strategy for preparing emotionally competent, resilient, and effective educators. Future research should explore longitudinal outcomes, cross-cultural comparisons and scalable reflective interventions to maximize both emotional and cognitive growth. Ultimately, deliberately cultivating emotional intelligence through reflective practices represents a transformative approach to teacher preparation, equipping educators to navigate the complex demands of modern classrooms.

Reference

1. Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): Technical manual*. Toronto: Multi-Health Systems.
2. Beauchamp, C. & Thomas, T. (2009). Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-189. <https://doi.org/10.1080/03057640902902252>
3. Brown, A. L. (1987). Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In F. E. Weinert & R. H. Kluwe (Eds.), *Metacognition, motivation, and understanding* (pp.65–116). Lawrence Erlbaum.
4. Bruner, J. S. (2003). *The process of education: Revised Edition*. Harvard University Press.
5. Erikson, E. (1968). *Identity: Youth and Crisis*. W. W. Norton.
6. Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>
7. Fried, L., Mansfield, C. & Dobozy, E. (2015). Teacher emotion research: Introducing a conceptual model to guide future research. *Educational Psychology Review*, 27(1), 139–151.
8. Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. Bantam.
9. Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by Cultivating Awareness and Resilience in Education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*, 28(4), 374–390. <https://doi.org/10.1037/spq0000035>
10. Larrivee, B. (2000). Transforming Teaching Practice: Becoming the critically reflective teacher. *Reflective Practice*, 1(3), 293–307. <https://doi.org/10.1080/713693162>
11. Mayer, J. D., Salovey, P. & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15(3), 197–215. https://doi.org/10.1207/s15327965pli1503_02
12. Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., et al. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105(3), 787–804. <https://doi.org/10.1037/a0032093>

13. Schön, D.A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Ashgate.
14. Schraw, G. & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7(4), 351–371. <https://doi.org/10.1007/BF02212307>
15. Taylor, S. G., Roberts, A. M. & Zarrett, N. (2021). A brief mindfulness-based intervention (bMBI) to reduce teacher stress and burnout. *Teaching and Teacher Education*, 100: 103284. <https://doi.org/10.1016/j.tate.2021.103284>
16. Zeidner, M., Matthews, G. & Roberts, R. D. (2009). *What we know about emotional intelligence: How it affects learning, work, relationships, and our mental health*. MIT Press.