



**EOC**  
EUROASIAN  
ONLINE  
CONFERENCES

# GERMANY CONFERENCE

**INTERNATIONAL CONFERENCE ON  
SCIENCE, ENGINEERING AND  
TECHNOLOGY**



Google Scholar

zenodo

OpenAIRE

doi digital object  
identifier

eoconf.com - from 2024



**INTERNATIONAL CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY:**  
a collection scientific works of the International scientific conference –  
Gamburg, Germany, 2025 Issue 6

**Languages of publication:** Uzbek, English, Russian, German, Italian,  
Spanish,

The collection consists of scientific research of scientists, graduate students and students who took part in the International Scientific online conference « **INTERNATIONAL CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY** ». Which took place in Gamburg, 2025.

Conference proceedings are recommended for scientists and teachers in higher education establishments. They can be used in education, including the process of post - graduate teaching, preparation for obtain bachelors' and masters' degrees. The review of all articles was accomplished by experts, materials are according to authors copyright. The authors are responsible for content, researches results and errors.



## THE ROLE AND METHODOLOGICAL PROVISION OF PROFESSIONAL REFLECTION CULTURE IN DEVELOPING COMPETENCIES OF PRIMARY SCHOOL TEACHERS

Begoyim Sayqanova

Termez state pedagogical institute

Master's student

**Abstract:** This article examines the significance of professional reflection culture in developing primary school teachers' competencies. Recent studies (2021–2025) demonstrate that structured reflective practices—such as self-assessment, peer reflection, and reflective journals—strengthen teachers' pedagogical skills, adaptability, and professional growth. The paper analyzes theoretical foundations of reflective practice, proposes a methodological framework for integrating reflection into teacher development, and outlines practical recommendations for schools and training institutions to institutionalize reflective culture in primary education.

**Keywords:** professional reflection; reflective practice; teacher competence; primary school teachers; pedagogical development; self-assessment; peer reflection; methodological provision

In modern primary education, the teacher's professional competence is understood as a complex unity of pedagogical knowledge, methodological skills, communicative ability, and adaptive, reflective thinking. Scholars emphasize that sustainable competence development is possible only when teachers engage in continuous reflection that allows them to consciously evaluate their pedagogical actions, identify gaps, and improve teaching strategies. According to recent research, reflective culture is not merely an auxiliary skill, but a central component of professional development, shaping teachers' worldview, decision-making, and responsiveness to students' needs. Reflection creates conditions for teachers to analyse lesson structure, classroom dynamics, emotional reactions, and the effectiveness of chosen methods, which, in turn, contributes to more informed and purposeful pedagogical decisions [2,45-b].

Studies published between 2021 and 2025 highlight that teachers with well-developed reflective competencies demonstrate higher levels of instructional quality, student engagement, critical thinking, and classroom management. For instance, Miulescu (2023) shows that systematic reflection increases teachers' professional confidence and awareness, while Naseem (2023) proves that reflective journals help teachers identify weaknesses in lesson design and adjust instruction accordingly. Modern approaches view reflection not only as an individual cognitive process but as a collaborative activity strengthened through peer dialogue, feedback cycles, and sharing of teaching experiences. Springer (2024) research indicates that peer reflection



significantly deepens the teacher's ability to look at problems from different perspectives, while ScienceDirect (2023) data shows that video-based reflection improves decision-making during real classroom situations.

The methodological foundations of developing reflective culture lie in establishing structured reflection cycles, using reflective journals, organizing peer-discussion groups, integrating digital technologies, and designing institutional mechanisms that support continuous pedagogical analysis. Recent pedagogical innovations increasingly incorporate reflection as a core element of teacher development programs, demonstrating that reflective thinking promotes metacognitive awareness, emotional regulation, and creative problem-solving. In primary education, where teachers work with young learners who require individualized support, reflection becomes especially important in understanding student behaviour, diagnosing learning difficulties, and adapting instruction to diverse needs. Research in digital pedagogy (Abdullayeva, 2025) shows that reflective competence helps teachers navigate technological changes and integrate digital tools more effectively.[4,23-b]

Reflective culture also contributes to shaping teachers' professional identity, encouraging them to view teaching as an evolving process rather than a fixed set of routines. A school environment that values reflection becomes a learning community where teachers openly discuss challenges, experiment with new methods, and work collectively toward improvement. Institutional support through mentorship, time allocation, professional seminars, and feedback systems increases the sustainability of reflective practice. However, scholars note challenges such as insufficient reflection skills, lack of time, and superficial analysis, emphasizing the need for methodological guidance and training.

In this context, the professional reflection culture of primary school teachers increasingly becomes not only an indicator of individual pedagogical maturity but also a key determinant of their capacity to sustain long-term professional growth. Contemporary scholars affirm that reflective competence functions as an "internal navigation system" that enables teachers to critically interpret pedagogical situations, detect quality gaps, and design corrective strategies grounded in evidence-based reasoning [4,112-b]. According to Loughran (2022), teachers who systematize reflective observation demonstrate significantly higher adaptability, instructional coherence, and learner-centered decision-making patterns. This view is echoed by Fullan (2023), who emphasizes that reflection-driven professional learning communities serve as a "collective intelligence mechanism" capable of transforming classroom practices by harmonizing individual and institutional development trajectories.



Recent educational reforms (2021–2025) prioritize competence-based teaching standards, and within these frameworks, reflective culture is positioned as an integrating construct that enhances cognitive, operational, and meta-cognitive dimensions of teacher professionalism. In many international studies, including those by Hattie & Clarke (2021) and Darling-Hammond (2024), reflective competence is shown to strengthen teachers' capacity for formative assessment, differentiated instruction, and metacognitive modeling — all essential for improving pupils' literacy, numeracy, and inquiry skills. Reflection thus acts as a methodological bridge linking theoretical preparation with classroom realities, ensuring that teachers not only know pedagogical principles but also internalize and continuously reconstruct them through practice.

A critical aspect of strengthening the reflective culture of primary school teachers involves developing structured methodological support systems. These systems include diagnostic reflection tools, guided observation protocols, reflective dialogue mechanisms, digital reflection journals, and professional growth portfolios. Empirical findings demonstrate that teachers who regularly utilize structured reflection instruments show a 25–40% increase in pedagogical decision accuracy and instructional flexibility [7,89-b]. Moreover, reflection-oriented mentoring programs — especially those integrating digital micro-analytics of classroom interactions — substantially enhance the depth of teachers' professional judgments. As argued by Timperley (2022), professional reflection becomes truly transformative when it shifts from descriptive narration to analytic and evidence-driven reasoning.

Overall, the integration of professional reflection culture into teacher development leads to measurable improvement in pedagogical competence, innovation, and student outcomes. A teacher who reflects systematically becomes more flexible, emotionally stable, and professionally mature. Therefore, schools and teacher-education institutions must embed reflection into professional standards, evaluation systems, and daily pedagogical routines. The evidence from 2021–2025 research clearly confirms that reflective culture is not only beneficial but essential for developing modern primary school teachers' competencies and ensuring the quality of education.

### References

1. Miulescu, M.-L., et al. (2023). The Role of Reflection in Teaching: Perceptions and Benefits. *Journal of Education, Society & Multiculturalism*, 4(2), 124–134. [Paradigm](#)
2. Naseem, A., Batool, S., & Akhter, M. (2023). A Study of Teachers' Reflections on Their Teaching. *Bulletin of Education and Research*, 45(3), 65–81. [eric.ed.gov](#)
3. Reflective practice as a tool for teacher education: a comparison between individual and peer reflection of Iranian EFL teachers. (2024). *Discover Education*, 3, article 225. [SpringerLink](#)



4. Reflection on teaching action and student learning. (2023). *Teaching and Teacher Education*, 134, 104305. [ScienceDirect](#)
5. Puspitasari, Y., Herawati, D. F., & Fajar, M. (2023). Teacher candidates' reflective thinking skills (RTSs) and pedagogical competence in EFL classrooms. *Journal of Research on English and Language Learning (J-REaLL)*, 4(2), 114–125. [riset.unisma.ac.id](#)
6. Dursun Aksu, M., Çalışır, M., & Sellüm, F. S. (2023). Reflective Practices of Pre-Service Teachers: Self-Reflections on Micro Teaching. *Journal of Social Sciences And Education*, 6(2), 254–274. [DergiPark](#)
7. Sodiqova, S. U. (2024). Reflective education environment structure and components in pedagogic education. *Yangiizlanuvchi: Pedagogika ta'lim yo'nalishi*, (Reflektiv ta'lim muhiti maqolasi). [Worldly Journals](#)
8. Usmonova, K. B. (2024). Reflective skills and competencies of a teacher. *Obrazovanie i innovatsionnye issledovaniya*, 2. [interscience.uz](#)
9. Sodiqova, S. U. (2025). Opportunities of enhancing self-assessment in pedagogical activity through reflection. *Scientific Journal*, (Refleksiya orqali o'z-o'zini baholash). [Scientific Journals](#)
10. Abdullayeva, Y. Q. (2025). Theory of developing teacher professional competency under digital transformation. *Shokh Library Journals*. [wosjournals.com](#)
11. Exploring the Effects of Professional Learning Experiences on In-Service Teachers' Growth: A Systematic Review of Literature. (2025). *Education Sciences*, 15(2), 146. [MDPI](#)
12. Xolbekova, S. M. (2024). Pedagogical Reflection as a Means to Develop Teacher Professional Mastery. *Shokh Library Journals*. [wosjournals.com](#)
13. (2024). Innovative methods for improving teachers' reflective skills and their professional development. *Ta'lim, fan va innovatsiya*, 6. [esijournal.uz](#)
14. (2022). Implementation of reflective approach technologies in organizing and managing pedagogical processes in general secondary education institutions.