

Improving The Methodology For Developing Creativity Competence In Prospective Primary School Teachers Within An Innovative Learning Environment

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ABSTRACT

This article analyzes ways to improve the methodology for developing the creativity competence of prospective primary school teachers within an innovative learning environment. In the context of ongoing educational reforms in Uzbekistan, there is an increasing demand for creative, independent, and critically thinking teachers, while higher pedagogical education still lacks a coherent methodological system aimed at systematically developing pre-service teachers' creativity competence. A review of recent international research indicates that creative problem-solving training, creative workshops, psychologically and pedagogically supportive learning environments, constructive teacher–student relationships, and targeted professional development significantly enhance learners' creative and critical thinking skills as well as teachers' professional capacities [1][2][3][4][5]. The article proposes a creativity-oriented methodological approach to teaching the course “Primary Education Pedagogy”, which includes designing creativity-focused lessons, integrating interactive methods (creative problem solving, project-based learning, case studies, and creative workshops), and implementing reflective assessment and monitoring tools. The proposed model is based on the integration of motivational, cognitive, practical-methodological, and reflective-diagnostic components of creativity competence and provides a basis for step-by-step development of prospective primary school teachers' creativity within an innovative learning environment. The novelty of this work lies in operationalizing creativity competence through a course-embedded design that connects instructional methods with observable indicators and continuous monitoring. The approach also clarifies how innovative learning environments—supported by collaboration, psychological safety, and reflective dialogue—mediate the transfer of creativity strategies into micro-teaching and school practice. The proposed toolkit can be used for syllabus redesign, practicum supervision, and the preparation of evidence for competence-based assessment in teacher education.

Keywords: Primary education; creativity; creativity competence; innovative learning environment; creative problem solving; creative workshops; pedagogical technology; assessment; reflection; teacher education.

INTRODUCTION

Primary education is a foundational stage where pupils' curiosity, flexible thinking, and readiness to explore are formed. Accordingly, the professional profile of the prospective primary school teacher increasingly requires creativity competence—an integrative construct that includes motivation for innovation, knowledge and understanding of creative pedagogy, the ability to design creative learning situations, and reflective skills for evaluating and improving practice. Despite the growing

emphasis on innovation in teacher education, creativity is often addressed through fragmented activities (isolated seminars or short-term trainings) rather than a systematic methodology embedded in core pedagogical disciplines. This paper argues that creativity competence should be developed through a coherent methodological model integrated with the course “Primary Education Pedagogy”, supported by an innovative learning environment that enables experimentation, collaboration, and reflective assessment.

In contemporary competence-based teacher education, creativity is increasingly framed as a professional capability rather than an innate trait. Accordingly, teacher candidates need structured opportunities to practice divergent and convergent thinking, to design open-ended learning tasks, and to evaluate creative outcomes using transparent criteria.

However, in many pre-service programs, creativity is addressed through episodic activities and is rarely embedded into core courses as an assessable learning outcome. This creates a gap between policy expectations for innovative teachers and the methodological resources available for course instructors.

This study addresses the following guiding questions: (1) What components and indicators can operationalize creativity competence in prospective primary school teachers? (2) Which course-based methods and learning conditions best support systematic development of creativity competence? (3) How can monitoring and reflective assessment be integrated into routine teaching practice?

LITERATURE REVIEW AND CONCEPTUAL BACKGROUND

International research conceptualizes creativity development as a structured and teachable process. For example, empirical and design-oriented studies emphasize that creative problem-solving (CPS) training enhances learners' creative and critical thinking through staged work with problem framing, idea generation, option evaluation, and reflective analysis [1]. Studies on creative workshops implemented in school libraries also demonstrate that deliberately designed creative spaces expand learners' independent inquiry, reading motivation, and opportunities for creative expression [2]. In addition, psychological and pedagogical conditions—such as motivational support, learner-centered instruction, interactive methods, and reflective dialogue—are identified as critical for developing the professional abilities of future teachers [3] [8][9][10] [11].

Research on classroom climate and teacher–student relationships underscores that supportive, trust-based, and cooperative interaction patterns increase engagement and strengthen the learning environment [4]. Similarly, studies on improving teacher effectiveness highlight the role of leadership, observation, and reflective coaching as

supportive mechanisms for professional growth [5]. In early childhood and primary-related contexts, professional development content is most impactful when it is transferred into classroom practice through purposeful instructional design and reflective follow-up [6]. However, evidence also indicates that teachers face practical constraints—workload, limited resources, and assessment pressures—that may hinder the consistent implementation of developmentally appropriate and creative practices [7] [12].

Taken together, these findings imply that creativity competence cannot be developed through single interventions alone. Instead, it requires a holistic model that integrates instructional design, interactive methods, supportive learning conditions, and reflective monitoring within the core curriculum of teacher education [13][14].

METHODS

Methodological Approach and Source Selection

Methodologically, the study combines (a) a conceptual–synthetic review of recent international research on creativity development, (b) a design-based translation of theoretical claims into deployable instructional artefacts, and (c) an alignment procedure that maps activities and assessment tools to competence components.

Search and selection of sources were guided by relevance to primary or early childhood teacher education, creativity/critical thinking interventions (e.g., CPS, workshops, PBL), and studies reporting enabling conditions such as classroom climate, relational trust, reflective coaching, and competence-based assessment.

To support transfer into practice, each proposed method is accompanied by a brief implementation logic (purpose → procedure → product/evidence → reflection questions). This ensures that instructors can incorporate the toolkit into seminars, micro-teaching, and practicum supervision without major structural changes.

Aim and Research Objectives

The aim of the study is to analyze theoretical approaches to improving the methodology for developing prospective primary school teachers' creativity competence in an innovative learning environment and to propose a course-based methodological model for designing and assessing

creativity-oriented lessons within “Primary Education Pedagogy”. To achieve this aim, the following objectives are addressed: (1) to systematize modern theoretical perspectives and recent international research related to creativity and creativity competence; (2) to identify key psychological and pedagogical conditions for developing creativity competence in an innovative learning environment; (3) to justify the didactic potential of “Primary Education Pedagogy” for creativity competence development; (4) to propose a model for lesson design and assessment aligned with the components of creativity competence.

Structure of the Proposed Methodological Model

Within the course “Primary Education Pedagogy”, the proposed methodological approach is grounded in the following principles: learner-centeredness, activity-based learning, collaboration and reflexivity, integration with an innovative learning environment, systematic organization, and step-by-step progression. The model is structured into three consecutive stages: diagnostic, developmental, and reflective–analytical.

In the diagnostic stage, the initial state of students’ creativity competence is assessed. Tools may include motivation and self-efficacy questionnaires, observation checklists, creativity-oriented tasks, and short reflective prompts to capture students’ experience with creative problem situations and their reflective habits.

In the developmental stage, lectures, seminars, and practical sessions are redesigned to explicitly develop creativity competence. Key methodological solutions include: (a) creative problem-solving tasks; (b) creative workshops and project work; (c) case-study analysis of pedagogical situations; (d) cooperative work in small groups; and (e) reflective discussion and peer assessment.

In the reflective–analytical stage, changes in creativity competence are analyzed using student portfolios, reflective essays, self-assessment forms, collaborative discussions, and short interviews. This stage enables evaluation of both learning outcomes and the effectiveness of the applied instructional design.

RESULT AND DISCUSSION

Instructional Toolkit for Creativity-Oriented Lesson Design

Creative problem-solving tasks require students to analyze a problematic pedagogical situation, generate multiple solution options, evaluate alternatives, and justify the selected solution. The staged logic of CPS—problem clarification, idea generation, analysis and refinement, and presentation—supports both cognitive and practical-methodological components of creativity competence [1].

Creative workshops provide an environment for experimentation and micro-teaching. In workshops, students can design lesson fragments, develop creative assignments, test innovative methods, and receive peer feedback, which strengthens their readiness to implement creativity-supportive pedagogy [2].

Case-study work develops the ability to interpret real or simulated classroom situations, consider learners’ individual characteristics, and propose flexible instructional decisions. Project-based tasks foster independent inquiry, information search and processing, and the creation of creative products (lesson plans, methodological recommendations, presentations), thus integrating cognitive and action-oriented aspects of creativity competence.

Across these activities, a supportive classroom climate and constructive teacher–student relationships serve as enabling conditions for sustained engagement and creative risk-taking [4]. At the institutional level, reflective support and coaching-oriented supervision can strengthen teacher candidates’ professional growth trajectories [5].

Reflective Assessment and Monitoring

To ensure methodological coherence, assessment and monitoring tools should be embedded throughout the course. Recommended instruments include: a portfolio of creativity-oriented lesson designs; reflective journals or short essays; peer- and self-assessment forms aligned with competence components; and observation notes during workshops and micro-teaching. These tools capture not only knowledge and skills but also the dynamics of motivation, values, and reflective capacity [15].

Practical Implications and Limitations

The proposed model prioritizes feasibility for pedagogical universities: it relies on existing course structures and reconfigures tasks and assessment rather than requiring additional courses. At the same time, instructors should

ensure psychological safety and a supportive climate so that students can take creative risks without fear of punitive evaluation [12].

Limitations of the current study are that it is primarily conceptual and design-oriented; therefore, the effectiveness of the toolkit should be validated through experimental or quasi-experimental designs. Future empirical work may compare cohorts using standard instruction versus the creativity-oriented model and examine changes across the motivational, cognitive, action-oriented, and reflective components.

From a policy and quality-assurance perspective, the toolkit can support competence-based monitoring in line with broader lifelong learning and key competences frameworks [15]. At the institutional level, the creation of a repository of creativity-oriented lesson designs and rubrics can contribute to program accreditation evidence and continuous improvement.

CONCLUSION

The analysis suggests that, within an innovative learning environment, developing prospective primary school teachers' creativity competence should not be reduced to isolated trainings. Instead, it needs to be systematically integrated into the content and instructional design of "Primary Education Pedagogy". International evidence confirms that creative problem-solving training, creative workshops, supportive teacher–student relationships, and psychologically and pedagogically enabling conditions significantly enhance creative and critical thinking as well as professional competence [1][2][3][4][5].

The proposed methodological model is structured into diagnostic, developmental, and reflective–analytical stages and targets the integration of motivational, cognitive, practical-methodological, and reflective–diagnostic components. The combined use of creative problem solving, creative workshops, project work, case studies, collaborative learning, reflective analysis, and peer assessment creates conditions for revealing and strengthening teacher candidates' creative potential.

The theoretical conclusions and methodological recommendations presented in this paper may support the modernization of course syllabi and practical training activities, the development of a bank of creativity-oriented lesson designs, and the planning of future experimental

research. Further studies should empirically test the effectiveness of the model, refine assessment criteria and indicators for creativity competence, and explore deeper integration with digital learning environments.

REFERENCES

1. Heidorn, S. (2025). The effect of creative problem solving training on students' creative and critical thinking skills and dispositions (Doctoral dissertation, University of Minnesota).
2. Toljaga, N. M. (2017). Creative workshops in school library (Doctoral dissertation, University of Belgrade).
3. Ramazanov, E. A., & Shabdinov, M. L. (2021). Psychological and pedagogical conditions for the development of professional abilities of future teachers. *SHS Web of Conferences*, 113, 00050.
4. Muehleisen, M. D. (2025). How teachers create teacher–student interpersonal relationships to build a learning environment (Doctoral dissertation, Grand Canyon University).
5. Powell, K. D. (2025). Improving teacher effectiveness (Doctoral dissertation, University of Mississippi).
6. Gallo, M. S. (2024). A case study of early childhood education teachers' understanding and application of professional development content for improving instruction (Dissertation, National University).
7. Parris, T. S. (2025). Early childhood teachers' perspectives on challenges using developmentally appropriate practices in the classroom (Doctoral dissertation, Walden University).
8. Guilford, J. P. (1967). *The nature of human intelligence*. New York, NY: McGraw-Hill.
9. Torrance, E. P. (1974). *Torrance Tests of Creative Thinking: Norms-technical manual*. Lexington, MA: Ginn.
10. Sternberg, R. J., & Lubart, T. I. (1995). *Defying the crowd: Cultivating creativity in a culture of conformity*. New York, NY: Free Press.
11. Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*,

24(1), 92–96.

12. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. London: Routledge.
13. Sawyer, R. K. (2012). Explaining creativity: The science of human innovation (2nd ed.). New York, NY: Oxford University Press.
14. Beghetto, R. A., & Kaufman, J. C. (2014). Classroom contexts for creativity. *High Ability Studies*, 25(1), 53–69.
15. European Commission. (2018). Council Recommendation on Key Competences for Lifelong Learning. Official Journal of the European Union.