



RESEARCH ARTICLE

Development of Creative Communicative Skills of Future Educators as A Pedagogical Problem

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Author's Contributions

All authors contributed equally to this research.

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ABSTRACT

This study addresses the critical pedagogical problem of developing creative communicative skills in future educators, recognizing the essential need for teachers equipped with sophisticated competencies in contemporary educational contexts. The study aims to analyze theoretical foundations of pedagogical competence and propose a comprehensive integrative model for developing creative communicative competencies. This investigation employs systematic literature analysis of current research and pedagogical frameworks to identify key components and development strategies. The analysis focuses on pedagogical frameworks, educational models, and competence development approaches from international research literature. Content analysis of peer-reviewed research literature and educational frameworks including UNESCO ICT Competency Framework and contemporary teacher development models. **RESULTS:** The study identifies five core components of creative communicative competence (cognitive, operational-activity, communicative, motivational-valueable, and reflective components) and proposes cluster-based educational approaches, individual learning strategies, and ICT integration as effective development pathways. Comprehensive, multi-dimensional approaches grounded in integrative theoretical models are essential for preparing educators with creative communicative competencies needed for inclusive and diverse educational environments. The integration of cluster-based learning, personalized pathways, and digital technologies provides promising frameworks for enhancing pedagogical education programs.

Keywords: pedagogical competence, creative communicative skills, future educators, teacher education, professional development, cluster-based learning, ICT competence

INTRODUCTION

The preparation of future educators in the 21st century faces unprecedented challenges requiring innovative approaches to professional training. The rapid transformation of educational paradigms, technological advancement, and evolving societal needs demand that

teachers possess not only subject matter expertise but also sophisticated creative communicative competencies (Nessipbayeva, 2012). Pedagogical competence has emerged as a multifaceted construct encompassing the ability to design, implement, evaluate, and develop effective learning experiences

tailored to diverse student needs (Hartini & Bhakti, 2018).

Creative communicative skills represent a critical dimension of pedagogical competence, enabling future educators to foster innovative learning environments, engage students meaningfully, and adapt teaching methods to varied learner needs (Khimmatalliev et al., 2020). These skills involve the ability to generate original educational ideas, communicate effectively across different contexts, and create novel learning experiences that promote student creativity and critical thinking (Nyshanova, 2014).

The development of creative communicative competencies in future teachers constitutes a significant pedagogical problem requiring systematic investigation (Khimmatalliev et al., 2023a). This challenge is particularly acute in the context of inclusive education, digital transformation, and the need for teachers who can inspire creativity, collaboration, and communication in their classrooms (Nessipbayeva, 2012). Research indicates that pedagogical competence relates to a teacher's ability to provide instruction that is engaging, creative, meaningful, and utilizes various media and approaches (Hartini & Bhakti, 2018).

This article addresses the theoretical foundations and practical implications of developing creative communicative skills in future educators, analyzing current research, proposing integrative models, and identifying pathways for enhancing teacher education programs.

RESEARCH DESIGN AND METHODS

This study employs a systematic literature review methodology to examine the theoretical foundations and practical applications of creative communicative competence development in future educators. The research integrates qualitative analysis of educational research literature, pedagogical frameworks, and international teaching standards to develop comprehensive understanding of competence development approaches.

Research Design: The investigation utilizes systematic literature analysis and conceptual synthesis to examine current research on pedagogical competence, creative education, and teacher professional development. This approach enables identification of key theoretical concepts, empirical findings, and best practices for competence development.

Research Subjects and Data Sources: The analysis focuses on peer-reviewed research literature, educational frameworks, and policy documents from 2012-2026. Key sources include the UNESCO ICT Competency Framework for Teachers, contemporary research on pedagogical competence, teacher education models, and evidence-based teaching practices. The scope encompasses international research on creative pedagogy, communicative competence, cluster-based education models, and ICT integration in teacher preparation.

Data Collection and Analysis Techniques: Content analysis was conducted through systematic examination of relevant research literature and educational frameworks. The analysis involved: (1) identification of core concepts and components of pedagogical competence; (2) synthesis of definitions and theoretical models of creative and communicative competencies; (3) examination of instructional approaches including cluster-based education, individual learning strategies, and digital pedagogy; (4) integration of international frameworks and best practices; (5) development of an integrative theoretical model organizing key components into coherent framework for competence development.

The analysis identified recurring themes across research literature, consolidated diverse theoretical perspectives, and synthesized findings into comprehensive model for creative communicative competence development. This systematic approach enabled rigorous examination of existing knowledge and evidence-based identification of effective development strategies.

Literature Review

1. Pedagogical Foundations Competence: Conceptual

Pedagogical competence represents a complex, multidimensional construct that has received considerable attention in educational research. The criteria and indicators of professional-pedagogical competence include communicative, cognitive, operational-activity, and motivational-valuable components (Khimmatalliev et al., 2023a). These interconnected dimensions form the foundation for effective teaching practice and professional growth.

Research identifies three main categories of pedagogical competence: meta competencies, professional competencies, and practical competencies (Delikatna, 2020). This tripartite structure emphasizes

the need for teachers to develop not only subject-specific knowledge but also reflective abilities, adaptive skills, and the capacity for continuous professional development (Susanto, 2020).

Pedagogical competence encompasses a teacher's ability to create necessary conditions for effective work, combining professional tasks with innovative approaches to student learning (Karimova, 2020). It involves successful teaching, positive student evaluations, measurable student learning outcomes, and ongoing development of teaching methods (García-Sampedro, 2026).

2. Creative Competencies in Teacher Education

Creative competence in pedagogy refers to the ability of teachers to generate original educational ideas, adapt teaching methods to learners' needs, and solve non-standard pedagogical problems (Khimmatiev et al., 2020). The development of creative abilities in future teachers requires specialized technologies and approaches that integrate creative skill development throughout professional training (Nyshanova, 2014).

The triangular model of creative pedagogy involves three interconnected elements: creative teaching, teaching for creativity, and creative learning (Cremin, 2021). This framework emphasizes that creative pedagogy aims to transform any subject class into a creative teaching process that produces creative learners (Cremin, 2021).

Research on creative competencies highlights several key characteristics: the ability to make responsible and sometimes risky decisions, sociability and collaboration skills, rapid learning of new information, and the capacity to combine existing knowledge to produce novel and useful learning experiences (European Proceedings, 2020; Nyshanova, 2014). Creative teachers demonstrate professional coherence that supports their ability to examine situations from different angles, imagine new approaches, and adapt to varied student needs (European Proceedings, 2020).

3. Communicative Competence in Pedagogical Practice

Communicative competence represents an individual's ability to effectively convey meaning across various contexts and interact meaningfully with diverse audiences (Celce-Murcia, 1993; Kiessling, 2021). In pedagogical practice, communicative competence involves the ability to freely express ideas, thoughts,

and feelings to various listeners across different educational contexts (Kiessling, 2021).

A pedagogical framework for communicative competence includes content specifications and guidelines for effective communication in teaching (Celce-Murcia, 1993). Communicative competence can be acquired through step-by-step skill development via repeated, reflected practice and experience (Kiessling, 2021).

Effective teacher communication skills are grounded in social constructivism and involve relational communication that enhances student learning and competence (Loy, 2006; Reith-Hall, 2022). Teachers benefit from strong communication skills that facilitate classroom management, student engagement, and the creation of supportive learning environments (High Speed Training, 2020).

4. ICT Competence and Digital Pedagogical Skills

The integration of information and communication technologies (ICT) in teacher education has become essential for preparing future educators. The UNESCO ICT Competency Framework for Teachers provides comprehensive guidance on developing effective ICT in education training programs (UNESCO, 2018a, 2018b). This framework addresses technological, pedagogical, and professional development dimensions of ICT competence (UNESCO, 2018a).

Digital pedagogical competency is built on four pillars: foundation, participation, citizenship, and production, with core cognitive and operational components (Preprints, 2025). Research indicates that teachers' ICT competency is influenced by various factors including access, training, institutional support, and individual motivation (Zhao, 2024).

Cluster-based education models have shown promise in enhancing ICT competence among future computer science teachers (Khimmatiev et al., 2026). These models provide structured approaches to developing digital competencies through collaborative learning, shared resources, and integrated technology experiences (Chahuán-Jiménez, 2025; Jin, 2022).

Theoretical Framework

1. Integrative Model of Creative Communicative Competence

Based on comprehensive analysis of current research, we propose an integrative theoretical model for developing creative communicative competence in future educators. This model synthesizes multiple

dimensions of pedagogical competence within a coherent framework.

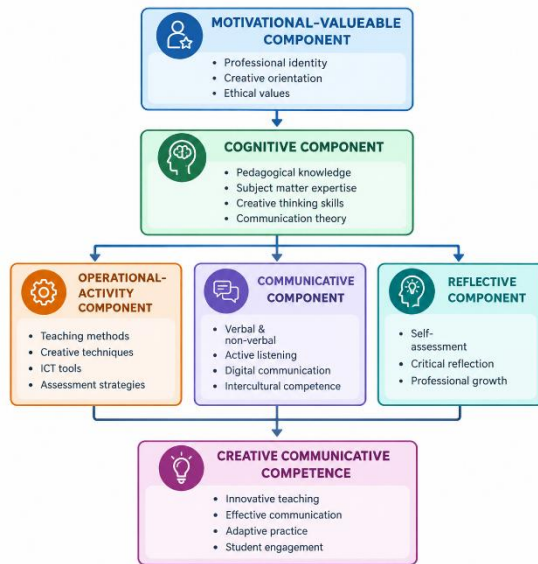


Figure 1: Integrative Model of Creative Communicative Competence Development

The model demonstrates the interconnected nature of five core components that contribute to creative communicative competence development. The motivational-valueable component provides the foundation, driving professional commitment and creative orientation (Khimmatiev et al., 2023a). The cognitive component encompasses theoretical knowledge and creative thinking skills essential for pedagogical practice (Nyshanova, 2014).

The operational-activity component focuses on practical teaching skills, creative techniques, and ICT integration (Khimmatiev et al., 2026). The communicative component emphasizes verbal and non-verbal communication, active listening, digital communication, and intercultural competence (Kiessling, 2021). The reflective component supports continuous professional growth through self-assessment and critical reflection (Susanto, 2020).

2. Cluster-Based Educational Approach

Cluster-based education models offer promising pathways for developing creative communicative competencies in future educators. Research demonstrates that cluster approaches enhance ICT competence and facilitate collaborative learning experiences (Khimmatiev et al., 2026).

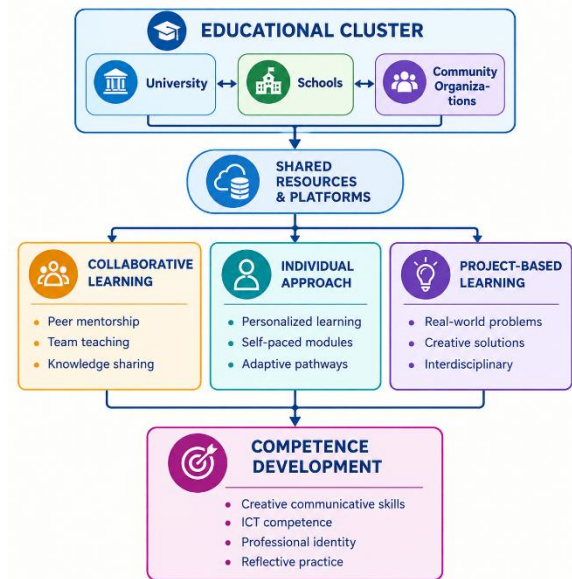


Figure 2: Cluster-Based Educational Model for Competence Development

The cluster model integrates universities, schools, and community organizations to create comprehensive learning ecosystems (Khimmatiev et al., 2026). This approach facilitates collaborative learning, individualized instruction, and project-based experiences that develop creative communicative competencies (Khimmatiev et al., 2023b).

Key features of the cluster-based approach include:

- Shared resources and digital platforms for collaborative learning
- Peer mentorship and team teaching opportunities
- Personalized learning pathways with adaptive modules
- Real-world problem-solving through interdisciplinary projects
- Integration of theoretical knowledge with practical application (Khimmatiev et al., 2026; Jin, 2022)

3. Individual Approach in Competence Development

Development of students' creative competencies based on individual approach in educational cluster conditions recognizes the unique characteristics, learning styles, and professional aspirations of future educators (Khimmatiev et al., 2023b). This approach emphasizes personalized learning trajectories that accommodate diverse needs and promote optimal competence development.

Individual approach principles include:

- a. Diagnostic assessment of existing competencies and learning needs
- b. Flexible curriculum design with multiple pathways
- c. Self-paced learning modules with adaptive content
- d. Regular feedback and formative assessment
- e. Support for autonomous learning and self-regulation (Delikatna, 2020)

Research indicates that individual approach in cluster conditions enhances creative competencies by providing tailored support, diverse learning opportunities, and personalized feedback mechanisms (Khimmatalliev et al., 2023b).

Components Of Creative Communicative Competence

1. Cognitive Component

The cognitive component encompasses theoretical knowledge and intellectual skills necessary for creative communicative practice. This includes:

Pedagogical Knowledge: Understanding of learning theories, teaching methodologies, assessment strategies, and child development principles (Hartini & Bhakti, 2018). Pedagogical content knowledge represents teachers' accumulated wisdom integrating pedagogy, student understanding, and subject matter expertise (Karimova, 2020).

Creative Thinking Skills: Ability to generate novel ideas, solve problems innovatively, think divergently, and make connections across disciplines (García-Sampedro, 2026). Creative thinking enables teachers to design engaging learning experiences and adapt instruction to diverse needs.

Communication Theory: Knowledge of verbal and non-verbal communication, interpersonal dynamics, group processes, and intercultural communication (Canale & Swain, 1981). This theoretical foundation supports effective interaction with students, parents, and colleagues.

Subject Matter Expertise: Deep understanding of content areas combined with knowledge of how to teach that content effectively to diverse learners (Hartini & Bhakti, 2018).

2. Operational-Activity Component

The operational-activity component focuses on practical teaching skills and creative techniques:

Teaching Methods: Proficiency in diverse instructional strategies including direct instruction, inquiry-based

learning, cooperative learning, project-based learning, and differentiated instruction (Hartini & Bhakti, 2018).

Creative Techniques: Ability to implement brainstorming, role-playing, simulations, gamification, design thinking, and other creative pedagogical approaches (Teacher Academy, 2025).

ICT Tools: Competence in using digital technologies for teaching, learning, assessment, and professional collaboration (Zhao, 2024). This includes learning management systems, educational apps, multimedia resources, and communication platforms.

Assessment Strategies: Skills in formative and summative assessment, portfolio development, performance-based evaluation, and using assessment data to inform instruction (Khimmatalliev et al., 2023a).

3. Communicative Component

The communicative component emphasizes interpersonal and digital communication skills:

Verbal and Non-verbal Communication: Ability to express ideas clearly, use appropriate language, modulate voice effectively, and employ supportive body language (High Speed Training, 2020).

Active Listening: Skills in attentive listening, asking clarifying questions, providing feedback, and demonstrating empathy (Kiessling, 2021).

Digital Communication: Competence in using email, video conferencing, social media, and other digital platforms for professional communication and collaboration (Preprints, 2025).

Intercultural Competence: Ability to communicate effectively across cultural differences, respect diversity, and create inclusive learning environments (Tuimebayeva, 2024).

Conflict Resolution: Skills in managing disagreements, negotiating solutions, and maintaining positive relationships (Reith-Hall, 2022).

4. Motivational-Valueable Component

The motivational-valueable component addresses professional identity and values:

Professional Identity: Development of a strong sense of self as an educator, commitment to the profession, and alignment with professional standards (UNESCO, 2018a).

Creative Orientation: Intrinsic motivation for innovation, willingness to take calculated risks, and openness to new approaches (European Proceedings, 2020).

Ethical Values: Commitment to equity, social justice, student wellbeing, and professional ethics (Nessipbayeva, 2012).

Intrinsic Motivation: Passion for teaching, curiosity about learning, and drive for continuous improvement (European Proceedings, 2020).

5. Reflective Component

The reflective component supports ongoing professional growth:

Self-Assessment: Ability to evaluate one's own teaching practice, identify strengths and areas for growth, and set professional development goals (Sancar, 2021).

Critical Reflection: Skills in analyzing teaching experiences, questioning assumptions, and learning from practice (Susanto, 2020).

Professional Growth: Commitment to lifelong learning, engagement in professional development, and participation in professional communities (Sancar, 2021).

Evidence-Based Practice: Ability to consult research, implement evidence-based strategies, and contribute to the knowledge base through action research (Cremin, 2021).

CONCLUSION

The development of creative communicative skills in future educators represents a critical pedagogical problem requiring comprehensive, multi-dimensional approaches (Khimataliev et al., 2023a). This article has examined theoretical foundations, proposed integrative models, and identified strategies for enhancing pedagogical competence development.

Key findings indicate that creative communicative competence encompasses cognitive, operational-activity, communicative, motivational-valueable, and reflective components that must be developed through intentional, scaffolded learning experiences (Khimataliev et al., 2023a, 2023b). Cluster-based educational models, individual learning approaches, and ICT integration provide promising pathways for competence development (Khimataliev et al., 2026). International frameworks such as UNESCO's ICT Competency Framework and global teaching standards offer guidance for policy and practice (UNESCO, 2018a, 2018b). However, significant challenges remain including resource limitations, traditional paradigms, and assessment constraints that must be addressed through coordinated efforts at policy, institutional, program, and individual levels.

Recommendations

1. Policy Level: Governments and education ministries should develop and implement national frameworks for creative communicative competence development in teacher education programs, ensuring alignment with international standards and local educational contexts.
2. Institutional Level: Universities and teacher education institutions should establish cluster-based collaboration models integrating schools and community organizations, creating comprehensive ecosystems for competence development with shared resources, digital platforms, and collaborative learning opportunities.
3. Program Level: Teacher education programs should redesign curricula to: (a) integrate creative and communicative competence development throughout all courses, not as isolated units; (b) incorporate individual learning approaches with diagnostic assessment and personalized pathways; (c) provide structured ICT integration with authentic technology use; (d) establish reflective practice components including peer observation, self-assessment, and critical reflection activities.
4. Individual Level: Future educators should: (a) engage actively in self-assessment and goal-setting for competence development; (b) seek diverse learning experiences including mentorship, peer collaboration, and community engagement; (c) embrace technology as a tool for creative teaching and ongoing professional learning; (d) cultivate reflective habits through journaling, discussion, and evidence-based practice.

Future research should investigate the effectiveness of specific development strategies, explore cultural variations in creative communicative competence, and examine long-term impacts on teaching practice and student outcomes. As education continues to evolve in response to technological, social, and economic changes, the preparation of creative, communicatively competent educators remains essential for achieving quality education for all learners.

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