A TECHNOLOGY FOR ORGANIZING TEACHERS' CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH THE USTOZQANOT PLATFORM

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ABSTRACT

This study examines the pedagogical potential, methodological structure, and implementation of the UstozQanot digital platform for supporting teachers' continuous professional development through professional learning networks. The platform was designed to connect teachers' identified professional needs with collaborative learning, resource development, classroom application, reflection, and outcome monitoring. Its content structure was informed by a needs survey of 370 teachers, which identified demand for lesson plans and teaching resources, visual materials, tests, interactive tasks, and platform features such as gamification, test creation, and methodological support. Based on these findings, the authors propose a six-stage professional development cycle: identifying professional needs, selecting needs-based methodological materials, engaging in network collaboration, conducting practical testing, reflecting on professional practice, and monitoring outcomes. Within this cycle, teachers collaboratively develop and peer-review instructional resources, test them in authentic classroom settings, collect evidence of their effectiveness, and refine them in response to results and collegial feedback. Outcome monitoring then informs a new needs assessment, allowing professional learning to continue as a recurring process. The proposed technology positions the platform as an integrated environment for collaborative, practice-oriented, evidence-based professional growth across schools and subject areas. This cyclical design is intended to sustain professional learning while keeping development closely connected to teachers' classroom needs.

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Keywords: *continuous professional development, professional learning networks, UstozQanot, digital platform, network collaboration, instructional resources.*

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Introduction

The system of continuing education, which constitutes one of the fundamental components of society, is developing rapidly in a variety of directions. Accordingly, the requirements imposed on educational outcomes are also being refined and acquiring a more contemporary character. In particular, mechanisms for teaching learners not only to acquire intellectual knowledge but also to apply that knowledge creatively are being reconsidered. Through its creative influence, intellect activates the educational process. Modern education is therefore tasked with creating learning conditions that contribute to the formation of an intellectually and creatively developed personality. In continuing education, an intellectually capable and creatively thinking teacher is regarded as one of the most important indicators of the successful functioning of an educational institution. The dynamics of socio-economic relations and

the aspiration to build a stable and developing society place new demands on higher education institutions. The modernization of higher education defines new goals and new directions (Qodirov, 2020).

Under conditions of digitalization, one of the urgent tasks is to train intellectually and creatively developed specialists who are able to make independent decisions within a given system, analyze problems, assume responsibility for their decisions, and act autonomously. Clarifying the nature and content of intellectual-creative competence requires clarification of the concepts of intellectual competence and creative competence. In dictionaries, the concept of 'competence' is interpreted as the aggregate of powers, rights, and duties assigned to a particular body or official by law, by the charter of that body, or by other regulations. Analysis of scientific literature and dictionaries indicates that the term competence derives from the Latin competere, meaning 'to be capable' or 'to be suitable,' and denotes a person's level of awareness and knowledge in a particular field.

Literature review and methodology

Under conditions of digitalization, the training of intellectually and creatively developed specialists who can make independent decisions, analyze problems, accept responsibility for the decisions they make, and function autonomously is among the pressing issues of contemporary education. Defining intellectual-creative competence and clarifying its essential content require a more precise understanding of both intellectual competence and creative competence. The concept of 'competence' is commonly interpreted as a set of legally or institutionally defined powers, rights, and duties. In scientific and lexicographic sources, the word competence, derived from the Latin competere ('to be capable, suitable'), is also used to denote a person's degree of knowledge or awareness in a particular field.

In the research of N. A. Muslimov, competence is understood as the ability to apply knowledge, skills, and personal qualities successfully in a particular sphere of activity. He defines professional competence as 'the ability of a person to successfully apply in professional activity the knowledge, abilities, and skills acquired in a particular field of education or specialty, together with developed personal qualities' (Raven & Stephenson, 2001). O. A. Qo'ysinov emphasizes that competence should not be opposed to knowledge, skills, or abilities. In his view, competence is a broader concept: it includes knowledge, skills, and abilities as educational outcomes, but it is not merely their mechanical sum. J. E. Usarov defines competence as the manifestation of experience and knowledge in a specific field or direction, readiness to carry out activity, and the ability of an individual to act successfully in various non-standard situations.

Table 1

Scholars Who Have Conducted Research on the Development of Intellectual and Creative Competence

Researchers from Uzbekistan	Researchers from the CIS / related scholarship	International researchers
G. A. Asilova; N. A. Muslimov; O. A. Qo'ysinov; J. E. Usarov; U. A. Usmanova; B. X. Xodjaev; D. I. Yunusova	I. E. Bryakova; V. N. Vvedenskiy; S. G. Molchanov; O. M. Bobiyenko; N. F. Radionova; S. G. Vorovshikov; O. E. Lomakina; A. I. Subetto; A. B. Xutorskoy	K. Keen; J. Raven; Susan Moore Johnson; Hannele Niemi; Rute Gomes Lopes; E. P. Torrance; M. Ford

According to G. A. Asilova, competencies are intended to teach individuals to act effectively in the various situations encountered in personal, professional, and social life. Particular attention is given to the ability to employ relevant knowledge, skills, and abilities when unexpected or problematic situations arise. Consequently, in teaching each subject, the competencies associated with that subject should be developed in accordance with its content and distinctive characteristics.

According to B. X. Xodjaev, competence serves to integrate a learner's self-development activities related to acquiring new personal experience. It is manifested through concrete activity in a particular situation and cannot be reduced solely to knowledge and skills. Rather, it is a new formation that integrates

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cognition, skills, practical experience, and experience of value-based relationships. Consequently, competence is a more complex socio-didactic construct than isolated knowledge, skills, and abilities: it is grounded in values, orientation, knowledge, and experience acquired both within and beyond the educational process and is expressed in the mobilization of acquired knowledge, experience, and attitudes in actual activity (Lopes, 2017).

Taking V. N. Vvedenskiy's position into account, competence may be understood as a set of specific functional characteristics of a particular profession—that is, the sphere in which a person applies knowledge, skills, and abilities. Generalizing the research literature, competence is therefore commonly considered an integral capacity. S. G. Molchanov interprets competence as the range of issues in relation to which a person possesses knowledge. He treats professional competence as a systemic concept and competence as one of its structural components; competence is expressed in behavior, while professional competence characterizes the degree to which an individual meets the relevant requirements and therefore represents the ultimate result of demonstrating competence. Developing the professional competence of higher-education teaching staff requires a high level of professional preparation, established pedagogical mastery, confident use of modern pedagogical and information-and-communication technologies, and sustained motivation toward an acmeological and creative approach to professional activity (N. Sultonova, 2021).

O. M. Bobiyenko, while not denying the importance of knowledge, skills, and abilities, explains the distinction between these concepts and competence as follows: unlike knowledge, competence exists in the form of activity rather than merely as information about it; unlike a narrowly defined skill, competence can be transferred and modified when solving different types of tasks and dealing with different objects; and unlike automated abilities, competent action remains conscious and enables a person to function not only in familiar conditions but also in new and unusual environments. N. F. Radionova emphasizes the relationship between the nature of competence and a person's convictions. K. Keen argues that competence is not simply a collection of knowledge or skills but a combination of complex cognitive abilities, higher-order knowledge structures, social and emotional skills and capacities, as well as attitudes and values. J. Raven characterizes competence as the knowledge and skills required for effective activity in different spheres and views it as a strategic resource for the sustainable development of society. In his view, it is a key factor in successful social, professional, and personal life.

A. R. Xodjaboev considers the competency-based approach to be a means of achieving a new quality of education. He argues that this view is not accidental: it concerns a new unit for measuring a person's level of education, because knowledge, skills, and abilities alone no longer permit a complete assessment of educational quality. O. E. Lomakina holds that a person may be professionally competent within a limited sphere of work; when an individual realizes his or her individuality and creative potential across several spheres, the discussion concerns not only professional competence but broader giftedness that enables successful action in different fields of science, culture, and other domains. I. E. Bryakova emphasizes that because competence is connected with personal development, creative activity, motives, and professionally significant qualities, it is appropriate to prepare specialists comprehensively while taking their value orientations into account.

Thus, in the literature, competence is interpreted as readiness to mobilize all available knowledge, skills, abilities, and capacities for the performance of integrated activity. It is also regarded as a combination of personal qualities, ability and readiness, and a system of knowledge, skills, and capacities. In addition, competence is associated with established motives, independent decision-making, the level of professional development, openness to innovation, interrelated knowledge that enables high-quality and effective action, and the capacity to carry out activity creatively (U. N. Sultonova, 2020).

Given the purpose of the present study, it is also necessary to consider the competence of teachers specifically. From the perspective of a number of researchers, a teacher's professional competence is

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determined not only by fundamental knowledge and skills, but also by the specialist's value orientations, motives for activity, understanding of self and the surrounding world, style of interaction with other people, general culture, and capacity to develop his or her own creative potential.

A. I. Subetto defines competence as a set of potential properties or a system of potential qualities of a future specialist. From this perspective, competence is associated with the graduate's capacity for self-activation in the relevant types of activity within the system of professional education. According to V. A. Slastenin, the quality of education is a major outcome of modernization, while a specialist's competence serves as an integral indicator of quality from the standpoint of educational modernization.

RESULTS

Intellectual development is a direction in the development of a future teacher's readiness for creative pedagogical work, reflecting the degree of its objective necessity in the process of teacher education. As a means of knowing and explaining the world through intellectual activity, it equips human theoretical thinking with the necessary knowledge, methods, and operations. By mastering the theoretical and practical logic of intellectual activity, a future teacher analyzes, synthesizes, classifies, and otherwise processes pedagogical situations and problems while searching for solutions. The essence of intellectual development lies in enriching the thinking of the future teacher-student with standardized operations of cognition and in processing information at a level that ensures the objective grounding of knowledge and understanding. In the process of teacher education, the intellectual development of the future teacher results from the algorithmization of processes for mastering pedagogical theory and practice, as well as from reflection on one's own educational-creative and pedagogical activity (U. N. Sultonova, 2019). The content of learners' intellectual competence is presented on the basis of an analysis of the works of educational scholars.

DISCUSSION

Competence should be formed as a product of individual creativity and autonomous self-development. Implementing a competency-based approach in education raises a number of questions. Although the competency-based approach strengthens the practice-oriented dimension of education, it does not reject knowledge-based education.

According to the scientific literature, the principal orientation of the competency-based approach is to enrich education with practical applicability. In contrast to a purely activity-based approach, the competency-based approach changes in accordance with the values and motivations of future teachers. It integrates methodological approaches that play distinct roles in education. Competence is manifested directly in activity and is connected with identifying, formulating, and solving numerous problems and tasks; thus, it is closely related to the activity-based approach. The acmeological approach also has integrative links with the competency-based approach, because it focuses on the individual's needs and opportunities, orientation toward pedagogical activity, goals and values, and the formation of spiritual and moral qualities (U. N. Sultonova & S. N. Sultonov, 2022b). The strategic objective of education is the formation and development of learners' intellectual capacities. In the present study, this objective is considered within the goals established by the State Educational Standard and the curriculum and is linked to understanding the purpose and means of implementing the competency-based approach in relation to students' knowledge, skills, and abilities.

Table 2

Vector Representation of Student Competence

Knowledge	Skills	Abilities	Competence	Personal characteristics

The educational goal is understood as the learner—the future specialist—acquiring knowledge that embodies his or her intellectual, spiritual, moral, and professional essence. The student's personal

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engagement in mastering professional activity as part of human culture ensures not merely the reproduction of a certain body of social experience but its expanded reproduction and enrichment, thereby supporting the creative development of the future teacher's personality. Intellectual qualities are manifested under organized educational conditions that create an atmosphere of cooperation and creativity.

Intellect (from the Latin intellectus—knowing, understanding, perceiving) is the human capacity for mental activity: the ability to reflect and transform life and the surrounding environment in consciousness; to think, study, learn about the world, and assimilate social experience; to solve diverse problems, make decisions, act rationally, and anticipate events and phenomena. Intellect includes such psychological processes as perception, memory, reasoning, speech, and others. Its development depends on innate ability, the capacities of the brain, active engagement, life experience, and other social factors.

Intellectual development reflects the objective necessity, within teacher education, of preparing a future teacher for creative pedagogical work. As a method of knowing and explaining the world through intellectual activity, it equips theoretical thinking with the necessary knowledge, methods, and operations. By mastering the theoretical and practical logic of intellectual activity, future teachers analyze, synthesize, classify, and otherwise process pedagogical situations and problems in the course of seeking solutions. Intellectual development enriches the thinking of future teacher-students through structured cognitive operations and through the processing of information at a level that enables the objective grounding of knowledge and understanding. Within teacher education, intellectual development emerges through the algorithmization of processes for learning pedagogical theory and practice and through reflection on one's own educational-creative and pedagogical activities.

The content of intellectual competence can be characterized in several dimensions. First, it concerns the relationship between reality and knowledge: sources of information—including objects of scientific cognition, technical sources, information media, and similar resources—activity in interaction with those sources, and the value of knowledge itself. Second, its social and personal significance lies in the learner's success in acquiring knowledge and readiness to continue study in professional educational institutions. Third, intellectual competence reflects the integrity of reality and knowledge through fundamental general-cultural knowledge represented in the basic sciences and other spheres of human activity and expressed in academic subjects through concepts, laws, principles, theories, materials, and related content. It also includes organizational processes of cognition, such as logical methods and modeling, as well as fundamental meanings and viewpoints.

Implementing planned pathways for developing the creative competence of future teachers enables their optimal intellectual development. By general intellectual development, researchers mean the development of the future teacher's thinking in a way that ensures the best results in educational and creative activity through the rational use of time and effort. Such development is based on the rational satisfaction of cognitive needs and the active selection of an optimal form of intellectual activity—dialectical thinking. A key factor determining the optimality of the future teacher's intellectual development is the organization of the educational process around active intellectual engagement and the formation of a scientific logic of thought. Physical, social, intellectual, spiritual, and individual development are inseparable components that form the system of personal development. The intellectual activity of future teachers should mobilize freedom of thought and creativity rather than restrict them within narrow educational-assessment frameworks. In light of contemporary social trends, an educational practice focused primarily on mastering the maximum possible volume of knowledge has lost much of its relevance; it must be replaced by the formation of a creative personality who can manage knowledge optimally, apply it effectively, and respond to the needs of society (U. N. Sultonova & S. N. Sultonov, 2022a).

The concept of creativity has been classified in various ways. I. A. Sharshov expanded such classifications into ten groups: (1) approaches that use novelty as a criterion of creativity; (2) unconscious

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creativity; (3) approaches examining the distinctive qualities of the creative personality; (4) creativity as a process; (5) result-oriented approaches focusing on the 'final product' of creativity; (6) creativity as activity; (7) identification of levels of creativity; (8) theories related to different directions of creative activity; (9) creativity from the perspective of intellectual abilities; and (10) creativity as an integral phenomenon. The source text also contains a repeated, contextually unrelated statement that life is impossible without water for humans, animals, birds, plants, and other living organisms; because its relationship to the surrounding argument is unclear, it is retained here only as a faithful reflection of the original text.

Such activity is manifested together with qualities such as responsibility, enterprise, determination, initiative, goal orientation, willpower, independent thinking, self-analysis, and self-control. In the course of the study, particular attention was given to comparatively clarifying the qualities of a creative personality. The principal source and subject of creativity is the creative individual. A creative personality is characterized primarily by the dominant role of cognitive motivation, research-oriented creative activity, the capacity to discover novelty, and originality in problem solving. This includes, for example, the ability to find original solutions, anticipate possible developments, and demonstrate aesthetic, moral, and intellectual capacities that support high-quality outcomes. Comparative analysis suggests that the qualities of a creative personality are expressed through motivational attitudes, alignment of personal development with core values, cognitive activity, innovativeness, stability of self-activation, objectivity in relation to reality, and a balanced relationship between reproductive and creative activity. A major distinction between creativity and other forms of intellectual labor is its continuous character (O. N. Sultonova et al., 2020).

The personal qualities of the creator play an important role in this process. A teacher's professional competence is broader than creative competence, while creative competence stands in a complex dialectical relationship with professional competence. A student's creative competence contributes to the effectiveness of professional competence. The foregoing analysis also highlights the important role of autonomous self-development in the socialization of a creative personality. Such an individual is capable of self-determination not only in relation to the goals of professional activity but also in relation to universal human values.

As can be seen, certain elements in definitions of creativity and creative capability—such as flexibility of thinking and the desire to seek new things—overlap, indicating the common nature of these phenomena. Following E. P. Torrance, many authors interpret creativity as a particular ability, property, or quality of the individual. Within conceptual approaches to the phenomenon, creativity is understood as a set of psychological and personal characteristics, including the capacity to be creative, to accept and generate new and non-standard modes of thought, and to produce numerous original and useful ideas. Researchers also define creativity as a personal quality expressed in creative productivity—that is, the generation of original ideas, the ability to depart from conventional patterns of thinking, and the capacity to resolve problem situations rapidly. Comparison of definitions of creativity reveals common elements, including flexibility of thinking, the desire to seek novelty, and the ability to overcome established patterns, which points to a shared underlying nature.

To distinguish the concepts of creative activity and creativity, researchers employ two characteristics: the process-result dimension, used to characterize creative activity, and the subjective-conditional dimension, used to characterize creativity as a personal quality. An important aspect of the present study is the integrative consideration of intellectual competence and creative competence. Some studies have treated students' readiness to master a combination of intellectual-creative pedagogical skills, personal qualities, and an individual style of activity as the subject of research. Analysis of the scientific literature shows that research into the problem of intellectual development in education and possible ways of addressing it has been conducted extensively. The study of teacher education from the perspective of the competency-based approach is grounded in the concept of developing professional-pedagogical

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competence. From this standpoint, an important indicator of the quality of the modern teacher is not only professional knowledge and acquired instructional and educational skills, but also intellectual-creative competence, which supports professional and personal development. Addressing the development of intellectual-creative competence therefore requires not only the assimilation of pedagogical heritage but also the active inclusion of future teachers in innovative pedagogical activity. Researchers note that human intelligence differs qualitatively from purely theoretical-academic reasoning: it involves a holistic understanding of a situation, the ability to identify the task within it, rapidly analyze influencing factors, and find solutions appropriate to the conditions of the specific situation.

Researchers identify several directions in the study of creativity. In the first, creative abilities are equated with the highest level of development of intellectual abilities. In the second, creativity is understood as a set of specific creative abilities grounded in divergent thinking. In the third, creativity is characterized as a general capacity to transform prior experience; here creativity is contrasted with routine activity, and particular emphasis is placed on the activation of unconscious processes. Its mechanism is described as the interaction of an active, dominant unconscious component with a passive, subdominant conscious component. In the fourth direction, creative abilities are understood as an integral personal quality that combines cognitive and personal domains (U. Sultonova et al., 2023).

In the contemporary world, educational processes are developing rapidly, accompanied by the emergence of new scientific approaches and innovative methods. Under such dynamic conditions, teachers and pedagogical communities face several distinctive tasks simultaneously: preparing young people for future professional activity, developing their capacity for independent thinking, supporting collaborative work, and cultivating critical thinking. The development of creative competence in education may therefore be implemented through contemporary approaches that support these aims.

Figure 1

Development of Creative Competence in Education

- Independent thinking
- Critical thinking
- Creative professional-pedagogical competence
- Development of personal qualities and skills
- Success in knowledge acquisition
- Concepts, laws, principles, theories, and materials
- Objects of scientific cognition, technical sources, and information resources

Conclusion

The effectiveness of developing the intellectual and creative competence of future primary school teachers depends on grounding the process in appropriate approaches and principles and on adequately examining the factors that influence it. Analysis of the scientific literature indicates that a synergetic approach is of particular importance in developing the intellectual and creative competence of future teachers. Accordingly, the present study is based on a synergetic approach to the development of future teachers' intellectual and creative competence.

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