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DEVELOPMENT AND ASSESSMENT OF PERSONAL-CREATIVE POTENTIAL: IN THE CONTEXT OF PROFESSIONAL DEVELOPMENT

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ФОРМИРОВАНИЕ И ОЦЕНКА ЛИЧНОСТНО-КРЕАТИВНОГО ПОТЕНЦИАЛА В КОНТЕКСТЕ ПОВЫШЕНИЯ КВАЛИФИКАЦИИ

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Abstract. This study focuses on the pedagogical and psychological aspects of developing personal creativity potential and shaping the creative abilities of students in the pedagogy field during professional development. The research involved students of the pedagogy program at network centers of the Institutes for Retraining and Advanced Training of Pedagogical Personnel within the higher education system. To assess the creative potential of the participants, responses to 51 questions based on Ye. E. Tunik's "Personal Creativity Diagnostics" methodology were analyzed. Creativity was examined from four perspectives: product, process, ability, and psychological viewpoint, which facilitates the formation of an individualized approach during professional development and supports the enhancement of students' creative potential. The results indicated a high interest in creative activity, innovation, and experimentation among participants, while in some cases, conservative attitudes and passivity were observed. The developed indicators for assessing personal creativity potential—overall efficiency index, originality index, and uniqueness index—provide a systematic and scientifically grounded way to identify students' creative capabilities. Furthermore, the findings serve as a foundation for the implementation of innovative reflexive methodological approaches, psychological support, and the design of assignments aimed at fostering independent creative activity for both educators and professional development systems.

Аннотация. Настоящее исследование направлено на изучение педагогико-психологических аспектов развития личностно-креативного потенциала и формирования творческих способностей слушателей педагогического направления в процессе повышения квалификации. В исследовании приняли участие слушатели педагогического направления сетевых центров Институтов переподготовки и повышения квалификации педагогических кадров системы высшего образования. Для оценки творческого потенциала слушателей использовались ответы на 51 вопрос, составленные на основе методики «Диагностика личного творчества» Е. Е. Туника. Креативность анализировалась в четырех направлениях: продукт, процесс, способность и психологическая перспектива, что позволяет формировать индивидуальный подход в процессе повышения квалификации и способствовать развитию творческого потенциала слушателей. Результаты исследования показали высокий интерес

слушателей к творческой активности, стремлению к инновациям и экспериментированию, при этом в некоторых случаях наблюдался консервативный подход и пассивность. Разработанные для оценки личностно-креативного потенциала показатели — общий индекс эффективности, показатель оригинальности и индекс уникальности — позволяют системно и научно обоснованно выявлять творческие возможности слушателей. Кроме того, результаты исследования служат основой для внедрения инновационно-рефлексивных методических подходов, психологической поддержки и разработки заданий, ориентированных на самостоятельную творческую деятельность педагогов и системы повышения квалификации.

Keywords: personal-creativity potential, creativity, professional development, pedagogical approach, innovative methods.

Ключевые слова: личностно-креативный потенциал, повышение квалификации, педагогический подход, инновационные методы.

At the global level, special attention is being paid to the professional self-development of in-service trainees, the continuous improvement of their qualifications based on personal-creative approaches, as well as the implementation of supervisory support, professional training, modular and collaborative technologies within professional development systems. In particular, fostering trainees' creative thinking abilities, independent learning skills, self-analysis, and personal development in order to enhance their personal-creative potential is of great significance. In the context of digital transformation, it has become increasingly important to cultivate competent and adaptable academic staff who are capable of assimilating innovations, integrating them into educational practice, and evaluating achieved outcomes. Worldwide, scientific research is being conducted on ensuring the complementarity of "traditional," "new," and "hybrid" models of teacher professional development, and on improving the pedagogical-psychological mechanisms for developing in-service trainees' personal-creative potential. Additionally, assessing the effectiveness of alternative forms of professional development, designing variable targeted training programs, and enhancing the andragogical model of developing teachers' personal-creative potential are gaining particular importance. Moreover, increasing trainees' personal-creative activity in the process of continuous professional development and developing their prognostic and risk-management competences within a personal-creative educational environment have become central issues. These trends are closely linked with contemporary educational methodologies and pedagogical approaches, creating a need to modernize teacher professional development systems. Therefore, the system of professional development must aim not only to prepare teachers to meet national standards but also to enable them to respond to international educational requirements. Creative thinking, innovation adoption, and the application of modern pedagogical methods are essential factors that ensure specialists' competitiveness and success in the global labor market. International experience demonstrates that the structure of various educational programs, their implementation, and their effectiveness confirm this assertion. Specifically, the continuous development of personal-creative potential among teaching staff is regarded as a mandatory component of professional activity in countries such as the Netherlands, Japan, Liechtenstein, the USA, Belgium, Germany, and Canada. Furthermore, within the framework of the United Nations Sustainable Development Goals (SDGs), particularly SDG-4 (Quality Education), continuous professional development of teachers and familiarizing them with modern teaching methodologies are emphasized. According to target 4.c, "By 2030, substantially increase the supply of qualified teachers, including through international cooperation in teacher training." This goal aims to establish a highly qualified teaching workforce in every country and to

strengthen mechanisms for their preparation. Based on these global trends and needs, several educational programs and regulatory frameworks have been adopted within the education system of Uzbekistan. Systematic measures have been implemented—particularly within the process of teacher professional development—aligned with national policy priorities and international educational standards. The preparation of professional pedagogical personnel who possess a solid command of educational and instructional methods, information and communication technologies, and foreign languages, as well as the ability to apply modern pedagogical technologies in the educational process, together with the identification of youth who exhibit a strong interest in the teaching profession and the establishment of a continuous system for their targeted training and development, constitute the priority directions for the advancement of the field of pedagogical education [1].

This, in turn, necessitates the improvement of the psychological-pedagogical foundations, the model, mechanisms, and technologies for developing learners' personal and creative potential. Creativity represents an individual's creative potential and the system of inherent abilities, whereas creation (creative work) denotes the process carried out on the basis of this potential and its resulting product. This, first and foremost, requires an examination of issues related to developing creative activity skills and enhancing the creative potential of trainees within professional development processes. In the course of our research, we focused on the philosophical, psychological, and pedagogical analysis of the concepts "creation" and "creativity." According to the *Philosophical Encyclopedic Dictionary*, creativity (from Latin *creo*—to create, to make) is described as the ability to produce creative changes aimed at finding unconventional solutions to emerging processes and problems [2].

It can be stated that a creative individual not only generates new ideas but also analyzes personal experiences and attempts to construct new knowledge based on them. Emotional-volitional stability, creative motivation, and cognitive curiosity play a decisive role in this process. For instance, in professional development programs, trainees are assigned non-standard tasks, required to find solutions to problem situations, or prepare creative projects within an innovative learning environment. Through this, they acquire not only theoretical knowledge but also practical creative skills. The above considerations demonstrate that the formation of a comprehensively developed generation largely depends on the education system and particularly on teachers who effectively perform within their professional domain. If a teacher is creative, students' development and worldview are shaped under the influence of such an atmosphere. A creative teacher, therefore, contributes to the formation of a creative and capable learner personality. Psychological perspectives suggest that the ability to approach problems creatively and nontraditionally is not always the direct result of learning or special training but often reflects personal characteristics. Undoubtedly, individual traits form the foundation of creativity; however, we cannot agree with claims that special preparation plays an insignificant role in its development. A person develops corresponding traits during professional preparation; thus, professionally important characteristics become more refined, and creative abilities manifest in activity as an integrated outcome called personal creativity. Creativity (Latin and English: *create*, "creative") is an individual's readiness to generate new ideas and is considered a component of giftedness as an independent factor [3].

The popularization of the term has expanded rapidly across disciplines, particularly within the social sciences and humanities, which have defined it according to their own methodological criteria. In philosophy, creativity is often regarded as a characteristic associated with the nature of human thinking. In psychology, creativity is understood as the manifestation of an individual's creative capacities (thinking, emotions, communication, personal activity) and generally describes its specific aspects, the products of creative activity, and the processes through which they are produced [4].

The study and development of creativity have been widely explored by Western scholars such as J. Guilford, E. P. Torrance, S. Mednick, C. Rogers, J. Renzulli, R. Sternberg, J. Taylor, and others. They developed diagnostic tools for assessing creativity and examined the relationship between creativity and intelligence. According to E. P. Torrance, the principal factor in the development of creativity is the ability to overcome externally imposed limitations and traditional standards. In his concept, creativity is associated with recognizing gaps or inconsistencies in one's knowledge system, identifying disharmony and deficiencies, analyzing them, and striving to eliminate them. This feature enables individuals to apply nontraditional approaches and generate innovative ideas during creative thinking. From this perspective, creative activity is not limited to complying with existing rules but involves transcending them to achieve success. Torrance also developed creativity assessment tests and described creativity through the following criteria: generating hypotheses related to a problem; examining and modifying hypotheses; identifying a problem based on the interpretation of outcomes; sensitivity to contradictions between knowledge and practical actions when solving a problem [5].

Thus, Torrance established criteria for assessing personal creativity. Some psychologists argue that creative, nontraditional problem-solving abilities do not always emerge merely from instruction or training but often reflect personality traits [6].

While individual characteristics indeed serve as the basis for creativity, it is also clear that intrinsic motivation-based systematic preparation plays a significant role in its development. Professional training shapes the individual accordingly; therefore, professionally relevant qualities are interpreted as learning outcomes. A specialist with creative potential may only emerge through the collaboration of both teacher and trainee in professional development settings. For this, instructors (moderator-teachers) must improve their practical skills using innovative technologies and reconstruct the structure, methods, and forms of trainees' professional development toward independent learning. This ensures the preparation of specialists with creative potential and the formation of abilities such as acquiring knowledge, independently applying and enriching it. According to S. Mednick, distinguishing between personal cognitive processes and intellectual mechanisms in creative abilities is crucial [7].

Personal cognitive processes involve the ability to articulate new ideas through verbal means. Such creativity is demonstrated in finding unconventional solutions to problematic tasks, generating new concepts, and efficiently navigating extensive lexical resources. For example, in pedagogical practice, a teacher may design creative question systems or develop new interactive methods to increase students' engagement—an example of verbal creativity. Intellectual mechanisms, on the other hand, represent the ability to express creativity visually or artistically—through drawing, designing visual solutions, creating schemes or infographics. For example, a teacher may visually illustrate new material during the lesson [8].

Pedagogical research indicates that, according to E. Fromm, creativity is the human capacity for wonder, understanding, and striving for knowledge [9].

He emphasizes that creativity reflects an individual's orientation toward discovering new knowledge and is characterized by analyzing existing experiences and generating original solutions. A creative person does not remain confined to routine situations but attempts to solve problems in unconventional ways. One fundamental feature of creativity is the ability to perceive new opportunities and transcend existing boundaries. According to Fromm, this capacity is closely tied to cognitive activity, intrinsic motivation, and freedom of thought. For instance, a creatively thinking teacher does not rely solely on traditional methods but integrates innovative technologies, creates an interactive learning environment, and develops individualized approaches for learners. Creativity, as he notes, is not solely a result but a process that encourages continuous inquiry, questioning, and deep reflection on personal experience. Mistakes are viewed as essential components of creative growth

because each new perspective or idea creates a basis for new knowledge. Human thinking and creativity are inherently interconnected. Russian psychologist Andrey Vladimirovich Brushlinsky notes that every person's thinking possesses at least a minimal degree of creativity [10].

J. Guilford interprets creativity as the ability to identify problems, generate solutions, produce numerous ideas, demonstrate flexibility, originality, and perform analytical and synthetic mental operations. External factors that foster creativity include the educational process and the active participation of teachers. Knowledge and information acquired during the learning process help individuals develop themselves and enhance their personal traits. According to well-known Russian pedagogue Tokareva, active pedagogical activity is inherently creative, and the adequate subject of such activity is a creative teacher [11].

From this, it is evident that both the organizers and participants of the educational process must possess creative tendencies. If a teacher's activity lacks creativity, the teacher becomes merely a transmitter of information. However, when a teacher incorporates creativity and personal characteristics into their work—effectively using innovative technologies and employing unique methods—they encourage trainees toward comprehensive exploration and demonstrate both personal and professional creativity. Research Methodology. The methodological basis of the study encompasses general scientific and pedagogical principles, including systemacity, historicity, didactics, dialectics, activity and cultural conformity, continuity of learning within the educational system, variability of instructional methods and forms, problem-based character, interdependence of educational practice and theory, and the unity of general education and specialized training in higher education institutions. In developing the creative personality of a pedagogical professional, it was deemed appropriate to employ online surveys, questionnaires, and analyses conducted on the basis of psychological and pedagogical principles, as well as the andragogical approach. To determine the level of development of creative skills among trainees participating in professional development courses, we initially sought to assess the existing situation. For this purpose, analysis was conducted using Ye. E. Tunik's method "Personal Creativity Diagnosis." This methodological procedure involved participants from the pedagogical specialization of the branch centers of the Institute for Retraining and Advanced Training of Pedagogical Personnel under the Higher Education System.

Results

The following results are derived from the respondents' answers concerning their personal-creative potential and creative abilities. The questionnaire consisted of 51 items, and responses were distributed across four categories: "*Agree*," "*Disagree*," "*Partially Agree*," and "*Difficult to Answer*." A general analytical summary is presented below.

Overall Analytical Trend. A substantial proportion of responses reflects key indicators of creative thinking, such as openness to novelty, initiative in problem-solving, and readiness for independent inquiry. In most items, the share of positive responses ("Agree") exceeds 49%, and in several cases surpasses 65%, indicating the presence of a certain level of creative potential among the trainees.

Interest in Innovation and Inquiry. 72.8% of participants report that they enjoy studying objects or phenomena in detail to discover something new (Item 2). 59% show a high interest in conducting experiments (Item 27). 38.8% indicate that they like trying new things to see the results (Item 44). At the same time, 19.2% believe that "it is better to do everything the usual way" (Item 9), reflecting the existence of a small group resistant to innovation.

Problem-Solving and Discipline. 56.3% of trainees try to guess the correct answer even if they are unsure (Item 1). 43.6% indicate that they continue working until they achieve success (Item 7).

However, 42.5% report that they do not search for alternative solutions once they find one (Item 28), which may hinder deeper creative exploration.

Imagination and Creative Fantasy. 69.2% enjoy imagining what they need to learn or do (Item 6). 47.6% are interested in imagining events that have never happened to them (Item 13). 48.1% like thinking about things that no one else has considered (Item 46). 45.4% imagine themselves as the main character when reading books or watching films (Item 30).

Social Activity and Communication. 64.8% enjoy making new friends regularly (Item 12). 49.2% like discussing their thoughts with peers (Item 21). However, a negative attitude toward public speaking emerges: 42.9% state that they “never liked” public speaking (Item 29).

Resistance and Conservative Attitudes. 46.9% prefer doing things in a habitual manner rather than introducing novelty (Item 9). 48% prefer that parents or teachers “never change” (Item 34). These findings indicate the presence of a subgroup with conservative tendencies, which may impede the development of creativity.

Characteristics of the Sample Group: The respondents—trainees specializing in pedagogy—consist primarily of professionals with more than ten years of pedagogical experience as well as those with less than ten years of experience. Consequently, their professional competencies and creative capacities vary, which is reflected in the heterogeneity of the results.

General Interpretation of Findings. Overall, the analysis demonstrates that most trainees exhibit significant interest in innovation, creative thinking, and experimentation. However, certain respondents show conservative approaches, hesitation, or resistance toward change. Additionally, some participants appear passive in self-expression (public speaking, sharing ideas). **Implications for Professional Development.** Based on these findings, it is advisable to integrate innovative and reflective methodological approaches into professional development programs. Establishing psychological support mechanisms, implementing productive creative tasks that foster independent thinking, and organizing experimental learning activities would contribute to enhancing the creative potential of trainees.

Discussion

In this study, the methodology for assessing creative potential was based on the methodological approaches proposed by leading scholars in the field. A set of indicators and indices was employed in the evaluation process to systematically identify participants' individual creative capacities. The first indicator is the general efficiency index, calculated as the ratio of the number of responses provided by the participant to the total number of tasks. This indicator serves as a primary criterion for determining the level of creative activity and demonstrates the effectiveness of individual creative performance. The second indicator is the originality coefficient, which reflects the degree of uniqueness of individual responses relative to the total number of answers. Its calculation is based on the cumulative value of response frequencies within the sample. This indicator plays a crucial role in evaluating the originality of respondents' thinking processes and their ability to deviate from standard patterns. The third indicator is the uniqueness index, determined by the ratio of non-repeated (i.e., unique) responses to the total number of responses. This index serves as a key measure of the exclusivity of creative thinking and the potential for generating novel ideas. These indicators provide precise and scientifically grounded criteria for analyzing learners' personal creative potential and serve as reliable tools for assessing individual creative abilities within professional development programs. For a systematic examination of results, creativity was classified into the following dimensions:

Creativity as a product: This dimension focuses on the characteristics of the creative output. The quantity, quality, and practical relevance of the creative product in relation to the studied object are considered primary criteria.

Creativity as a process: Creativity is analyzed as a dynamic process. The initiation, progression, transformation, and outcome of the process are examined. The emphasis is placed not on the objective production of a creative product but on the various stages, levels, and types of creative thinking.

Creativity as a ability: This approach views creativity as an individual cognitive ability, emphasizing the capability to generate new ideas and develop innovative solutions.

Creativity from a psychological perspective: This dimension associates creativity with self-activation and self-development processes. Special attention is given to evaluating the creative potential of professionals who actively engage in self-development during professional training.

This comprehensive methodological framework enables an accurate and scientifically grounded assessment of learners' creative potential and supports the establishment of individualized approaches in the professional development of educators.

Conclusion

The findings of the study indicate that fostering learners' personal and creative potential during professional development is of crucial importance. Creativity is not merely the ability to generate new ideas, but also encompasses independent thinking, problem-solving skills, and the capacity to develop innovative solutions. The analyses conducted within the scope of the research revealed that the participants demonstrated a high level of interest in creative activity, a willingness to explore new ideas, and a readiness to experiment. However, in certain cases, tendencies toward conservatism and passivity were also observed. The indicators developed for assessing personal creative potential — namely, the general efficiency index, the originality coefficient, and the uniqueness index — allow for a systematic and scientifically grounded identification of participants' creative abilities. Creativity was examined across four dimensions: as a product, as a process, as an ability, and from a psychological perspective.

This multidimensional approach supports the formation of individualized learning strategies and contributes to the development of learners' creative potential within professional development programs. Consequently, integrating innovative and reflective methodological approaches into the professional development system, establishing psychological support mechanisms, and introducing tasks that promote independent creative activity provide effective opportunities for enhancing learners' personal and creative growth. At the same time, educators' own creativity plays a fundamental role in encouraging creative engagement among learners.

The research we conducted, along with the methodological surveys administered to participants, helped to determine their initial levels of creative potential and enabled us to outline clear directions for subsequent stages of the process. As a result, the research hypotheses were confirmed. Thus, the development of learners' creative and innovative competencies should be regarded as one of the essential conditions for conscious, practice-oriented learning, fostering deeper comprehension of educational content and stimulating well-rounded personal development. Creativity in the professional sphere functions as a key characteristic that enables specialists to adapt to working conditions, engage in continuous self-development, and cultivate an individualized style of professional activity.

The higher the level of creative potential and the greater the variability in choices, the more likely an individual is to select optimal solutions for specific situations. Consequently, this leads to greater productivity both in the professional and educational domains.

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