

ABSTRACT

on the dissertation work for degree of Doctor of Philosophy (PhD) in specialty 6D010300 - Pedagogy and psychology Burayeva Zhanat Bauyrzhanovna on the theme «Formation of pedagogical creativity of future IT teachers»

Actuality of the research. At present, society is at the beginning of the revolution that will radically change our habits of normal life, the world is entering a period of profound and rapid changes in technological, economic and social spheres.

The National Plan "100 Concrete Steps", which is the basis for improving the domestic system of higher education, defines "... increasing the competitiveness of trained personnel and increasing the export potential of the education sector."

The message of President K. Tokayev "Constructive public dialogue is the basis of stability and prosperity in Kazakhstan" called for a comprehensive implementation of measures to improve the quality of education. This is due to the rapid development of the Fourth Industrial Revolution, in which the role of human capital is increasing. The main characteristics are education, new requirements for stakeholders, new global requirements, global competition between education providers, intrasystem innovators (educational institutions).

The State Program for the Development of Education and Science of the Republic of Kazakhstan for 2016-2019 states that "the coverage of students with trilingual training programs is unsatisfactory. There is a need to improve the language competence of both students and teachers. Scientific and methodological support for teaching subjects in English is not sufficiently developed.

One of the five main directions of the implementation of the state program "Digital Kazakhstan" is: "Development of human capital - transformation, including the creation of the so-called creative society to ensure the transition to a new situation - the knowledge economy. "In particular, the increase in the number of specialists trained in basic ICT skills for the development of human capital in 2022 was identified as an effective indicator for reaching 300,000 people. This area actualizes the training of future informatics teachers in the higher education system, ready for professional growth in a creative society".

The state program for the development of education and science in the Republic of Kazakhstan for 2020-2025 sets the task of "ensuring a high status of the teaching profession, modernizing teacher education".

This is reflected in the Education 2030 Incheon Declaration, which is guided by the fourth UN Sustainable Development Goal "Ensure quality and equitable education for all and access to lifelong learning" to improve the quality of domestic education. Promotes knowledge ... and also ensures the acquisition of analytical skills, problem solving skills and other high-level cognitive, interpersonal and social skills.

The above requirements determine the need for scientific research on the formation of pedagogical creativity of future teachers of informatics in the higher education system.

Psychological and pedagogical foundations, features and functions of the process of professional training of a future specialist are determined by scientists-educators, in particular scientists in the field of education V.I.Andreyev, N.V.Kuzmina, V.V.Serikov, V.A.Slastenin, N.D.Khmel, Sh.T.Taubayeva, K.M. Berkimbayev and others.

The research work of the following domestic and foreign scientists is devoted to the study of the professional training of future teachers of informatics: M.P.Lapchik, E.Y.Bidaibekov, V.V.Grinskun, S.M.Kenesbayev, A.E.Sagymbayeva, T.A.Voronenko, L.M.Ivkina and others.

The English language as a source of creativity and the development of creative thinking was studied by educational scientists V.V.Moroz, N.A.Alekseyeva, S.L.Bukovsky, M.V.Chilingaryan, M.M.Kodirova, V.V.Nikulina, N.M.Alothman, A.Yavuz, A.Zaker, R.H.Jones, J.A.Maley, N.Peachey, C.Richards and others.

The problem of creativity from the point of view of psychology has been widely studied by many foreign and domestic scientists. The psychological foundations of creativity and creative thinking among foreign scientists were studied by J.P. Guilford, E.P. Torrance, R.L. Mooney, M.A. Wallach, M.T.Mednick, R.J. Sternberg, R.A.Beghetto, J.C. Kaufman, T.M. Amabile, M.Csikszentmihalyi and others.

The problem of the formation of students' creativity was studied by domestic scientists: B.A. Ospanova, A.S. Shvaikovskiy - the formation of students' creativity, A.A. Zholdasbekov - the psychological foundations of creativity, K.M. Nagymzhanova - the formation of pedagogical creativity of students in the context of innovative education, A. E. Tashbulatova - the creative personality of the future teacher of chemistry, B. K. Saktaganov - the formation of the creative thinking of cadets in the army, I. I. Sagdullaev - the formation of the acme-creativity of future teachers, A.B. Tasova - the formation of the communicative creativity of primary school teachers.

The problem of the formation of pedagogical creativity, close to the subject of our research, is considered in the works of E.E.Shcherbakova, I.P.Osobov, K.M.Nagymzhanova.

As a result of the analysis of the research and scientific-pedagogical work of these scientists, it was shown that so far there has been no research on the formation of the pedagogical creativity of future teachers of computer science in teaching English, that only its individual aspects are covered and the following contradictions exist: between the level of professional training of future teachers of informatics, the demand for society and the lack of theoretical and methodological substantiation of the content of education in the formation of their pedagogical creativity; the current state of teaching English subjects to future computer science teachers and the growing public demand for computer science teachers who are fluent in English; insufficient study of the possibilities of disciplines taught in English and its theoretical and methodological basis for the formation of pedagogical creativity of future teachers of informatics.

The search for a reasonable and unique solution to these contradictions led to the definition of the research problem and the choice of the topic: "**Formation of pedagogical creativity of future IT teachers**".

Purpose of the research: Theoretical substantiation of the formation of pedagogical creativity of future teachers of informatics when teaching subjects taught in English, development of a methodology and verification of its effectiveness in practice.

Object of research: the process of professional training of future teachers of informatics in higher educational institutions.

Subject of research: the process of forming the pedagogical creativity of informatics teachers when teaching subjects taught in English.

Research hypothesis: if the functional-procedural model and methodology for the formation of the pedagogical creativity of future teachers of informatics are developed and implemented into practice, then the pedagogical creativity of future teachers of informatics will be formed at a high level, because the proposed functional-procedural model and methodology are based on the theory of creativity in science, concepts of teacher education, theories of pedagogical creativity, teaching methods in English.

Research objectives:

1. To determine the historical, pedagogical and methodological foundations of the study of the formation of pedagogical creativity of future teachers of informatics;

2. Determine the theoretical foundations of the formation of pedagogical creativity of future teachers of informatics;

3. Development of a functional and methodological model of the formation of pedagogical creativity of future teachers of informatics;

4. Development of a methodology for the formation of pedagogical creativity of future teachers of informatics when teaching subjects taught in English, and verification of its effectiveness in the course of experimental work.

The main idea of the research: the formation of pedagogical creativity of future teachers of informatics when teaching subjects in English contributes to the preparation of creative, intelligent and competitive teachers in the country in accordance with the requirements for spiritual renewal and professionalism in the fourth industrial revolution.

The methodological and theoretical basis of the research is a system of general theories aimed at personal development, social and philosophical foundations of education; principles of modern didactics; personality-oriented psychological theories in education; theory of knowledge, principles of higher education, principles of creative theory, theoretical concepts of creativity, pedagogical creativity.

Sources of research: fundamental philosophical, psychological and pedagogical research and advanced experience of domestic and foreign scientists in the formation of creative abilities, creativity, pedagogical creativity; Laws of the Republic of Kazakhstan "On Education", State standards of compulsory education and higher education of the Republic of Kazakhstan, regulatory documents of the

Ministry of Education and Science of the Republic of Kazakhstan on education, State program for the development of education of the Republic of Kazakhstan for 2020-2025, Law "On the status of teachers", professional standard teachers, scientific and pedagogical publications; research and practical experience of PhD student.

Research methods: theoretical analysis of the problems of research of philosophical, psychological and pedagogical literature, scientific works, dissertations; Study of regulatory documents and concepts of educational policy of the Republic of Kazakhstan; analysis of best practices; questionnaires, interviews, testing, diagnostic, pedagogical, corrective methods, methods and techniques of mathematical and statistical processing.

Scientific base: Khoja Akhmet Yassawi International Kazakh-Turkish University, South Kazakhstan State Pedagogical University, Korkyt Ata Kyzylorda State University.

Scientific novelty and theoretical significance of the research:

1. The historical, pedagogical and methodological foundations of the study of the problems of the formation of pedagogical creativity of future teachers of informatics have been determined;

2. The theoretical foundations of the formation of pedagogical creativity of future teachers of informatics have been determined;

3. A functional-procedural model of the formation of pedagogical creativity of future teachers of informatics has been developed;

4. A methodology for the formation of pedagogical creativity of future informatics teachers when teaching subjects in English has been developed, the effectiveness of which has been tested in the course of experimental work.

Practical significance of the research: An educational and methodological complex for the formation of pedagogical creativity of future teachers of informatics when teaching subjects in English has been developed and introduced into the educational process: an elective course program: "New information and pedagogical technologies"; Textbooks: "English. A textbook for future teachers of informatics", "Pedagogy. Creative Pedagogy", electronic textbook: "Creative Pedagogy".

The research results can be used in the process of professional training of future teachers of informatics in higher educational institutions, training centers, teacher training colleges and general secondary education, additional education.

The following provisions are brought to the defense:

1. In the process of theoretical substantiation of the research problem, the main provisions of the dissertation were clarified. According to our concept, creativity is a personality trait associated with a person's creative activity, the need for new products, the emergence of original ideas, an effective solution to non-standard problems, the optimal transformation of information, unusual thinking, behavior.

2. According to the study, "the pedagogical creativity of a future informatics teacher is his or her creative readiness to quickly identify communicative and

didactic problems in pedagogical activity using traditional and digital pedagogical technologies and the introduction of new effective solutions."

3. The components of pedagogical creativity are motivation for pedagogical activity, creative thinking, decision-making and pedagogical activity of the future teacher.

4. Formation of pedagogical creativity of future teachers of informatics in teaching subjects in English: determined by the development of specially developed subject programs, textbooks and manuals; determined by the use of various forms, teaching methods in the educational process; reflected in experimental work.

Conducting research results. The main conclusions and content of the study were discussed at international scientific and practical conferences: Materials of the XXVIII International Scientific and Practical Conference "Prospects for the Development of Science and Education" (Moscow, 2018), Materials of the XXVI International Scientific and Practical Conference "Scientific Research: Key Problems of the Second Millennium" (Moscow, 2018), Materials of the XXVI International Scientific and Practical Conference "Fundamental and Applied Research in the Modern World" (St. Petersburg, 2019), Materials of the international scientific-practical conference "Process and topical problems of higher education" (Taraz, 2019), International scientific and practical journal "World Science and Innovation 2019: Central Asia" (Nur-Sultan, 2019), Materials of the I International Conference "The Great Silk Road - the path to peace, harmony and stability - 2019" (Turkestan, 2019).

Publications. 15 scientific papers have been published in the press that determine the content of the dissertation: 4 articles were published in scientific publications recommended by the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan, 1 article in a foreign journal, which is included in the Scopus database, 7 articles in international scientific conferences, 2 study guides and 1 electronic study guide.

The validity and validity of the study. The main principles of fundamental pedagogical and psychological work were guided by the reliability, approval, implementation of the results of the dissertation research. It is based on theoretical and methodological concepts, the platforms were used in accordance with the purpose of the study. The experimental work corresponded to the main tasks. Its results were processed and the results of the analysis of the data obtained were provided.

The structure and content of the work: The research work consists of normative references, notes, an introduction, 3 chapters and conclusions, a list of references and applications.

The introduction of the work confirms the relevance of our topic, determines the object of research, the subject of research, scientific forecast, goals, theoretical and methodological foundations of research, research methods, research sources, scientific novelty and theoretical significance of the research, the main provisions submitted for defense.

The first section "Historical, pedagogical and methodological foundations of the study of the formation of pedagogical creativity of future teachers of informatics" examines the history, foundations, principles, methods and results of the study of pedagogical creativity, analyzes domestic and foreign experience in the formation of pedagogical creativity of future teachers of informatics, determines the methodological approaches to the formation of pedagogical creativity future teachers of informatics.

The second section "Theoretical foundations of the formation of pedagogical creativity of future teachers of informatics" examines the theory of creativity and human talent in psychology, an analysis of the possibilities for the formation of pedagogical creativity of subjects taught in English and the ideal model of a teacher of creative informatics, and in this section, a functional-procedural model of the formation of pedagogical creativity is proposed future teachers of informatics in teaching subjects taught in English.

The third section "The content of experimental work on the formation of pedagogical creativity of future teachers of informatics" presents the content of the methodology for the formation of pedagogical creativity of future teachers of informatics, presents the goal and stages of determining the effectiveness of the methodology for the formation of pedagogical creativity of future teachers of informatics and the results of experimental work.

The conclusion contains conclusions and scientific recommendations based on the results of theoretical and experimental work.