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ORGANIZATION OF A TRAJECTORY OF EDUCATIONAL COMPETENCES OF FUTURE TEACHERS BASED ON FORESIGHT RESEARCH METHODS

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Abstract: This scientific article discusses the issues of organizing the process of developing creative competencies of future teachers based on Foresight research methods. Rapid changes in the education system require teachers not only professional knowledge, but also such competencies as foresight, innovative thinking, and flexibility. From this point of view, Foresight methods are analyzed as an effective tool for planning the educational trajectory of future teachers.

Keywords: future teacher, creative competence, Foresight research methods, educational trajectory, pedagogical innovation, professional development.

ENTRANCE

The current context of globalization and digital transformation, new demands are being placed on the education system. In particular, the professional training of future teachers should not be limited to theoretical knowledge, but should also include the ability to think creatively, take an unconventional approach to problems, and anticipate future needs. Therefore, the formation of creative competencies in pedagogical education is becoming an urgent issue. Foresight research methods play an important role in this process. These methods allow analyzing future trends, identifying possible development scenarios, and consciously designing the educational trajectory. Creating an individual educational trajectory for future teachers serves to systematically and purposefully organize their professional growth.

In the modern education system, the formation of creative competence of future teachers is one of the important pedagogical tasks. Creative competence includes not only the ability of a teacher to think creatively, but also the ability to independently solve problems in the educational process, put forward new ideas and implement innovative approaches in practice. Today, in the rapidly changing educational environment, a teacher's flexibility and openness to innovation remain one of the factors determining his professional success. Creative competence includes components such as critical thinking, reflection, communicative activity and initiative. These components play an important role in the professional formation of a future teacher. Especially in pedagogical activity, standard solutions do not always give the expected result. Therefore, the teacher needs to develop new approaches in accordance with the situation and effectively organize the educational process.

The foresight research methods were initially used to forecast economic and technological developments, they were later widely applied in the field of education. These methods serve to identify possible future trends, analyze alternative development paths, and make strategic decisions. The use of foresight methods in the educational process allows for long-term planning of the professional development of future teachers. The foresight approach in education, unlike traditional planning, focuses not only on the current situation, but also on future needs. This helps to form a new way of thinking in pedagogical education. By participating in foresight activities, future teachers acquire the skills to foresee future educational problems, clarify their professional goals, and develop a personal development strategy.

Refers to an educational path organized in accordance with the individual capabilities, interests and professional goals of a person. Creating an individual educational trajectory for future teachers is important in developing their creative competencies. Foresight methods serve as an effective tool in this process. An educational trajectory organized on the basis of foresight

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helps to consciously plan the future professional activities of a future teacher. For example, by creating scenarios, expert assessment and analyzing alternative development options, students begin to realistically assess their capabilities. This increases their responsibility for the educational process and encourages them to work on themselves. Foresight methods also enhance reflexive activity in the educational process. The future teacher understands the need to evaluate his knowledge and skills and adapt them to future requirements. As a result, the educational trajectory becomes dynamic and flexible, not static.

The educational trajectory based on foresight methods is more effective when combined with innovative pedagogical approaches. Problem-based learning, project activities, and interactive methods serve to develop the creative thinking of future teachers. These approaches transform students from passive listeners to active participants. During project activities, future teachers try to solve real pedagogical problems. When this process is combined with foresight methods, students take into account not only the current situation, but also possible future problems. As a result, their professional thinking expands further and creative approaches are formed. Interactive methods are important in developing communicative competence. Future teachers acquire the skills to justify their opinions, work in a team, and accept alternative ideas. This is an important component of creative competence.

To determine the effectiveness of the educational trajectory, it is necessary to organize a regular monitoring and evaluation process. Foresight methods also create important opportunities in this regard. Analyzing the dynamics of the development of future teachers, identifying changes in their creative competencies and making necessary adjustments increases the quality of the educational process. It is appropriate to use qualitative and quantitative indicators in the monitoring process. For example, reflexive diaries, portfolios and expert assessments allow for a comprehensive assessment of the professional development of a future teacher. This approach serves to individualize the educational trajectory and adapt it to future requirements. Foresight research methods are of strategic importance in developing the creative competencies of future teachers. An educational trajectory organized on the basis of these methods serves to increase the effectiveness of pedagogical education and prepare competitive teachers in the future.

METHODOLOGY

Developing creative competencies of future teachers and designing educational trajectories have been emerging as one of the most relevant scientific directions in pedagogical science in recent years. Among Uzbek scientists, special attention is paid to the issue of a competency-based approach in the process of training pedagogical personnel. In particular, R.H.Djuraev[1] in his research emphasized the importance of a person-oriented and competency-based approach in the modernization of pedagogical education. In his opinion, the professional development of a future teacher is directly related to his ability to think independently and make creative decisions. Also, Kh.Mukhamadiyeva[2] analyzed the issue of forming pedagogical competencies based on a systematic approach. In her works, the creative activity of a teacher is interpreted as an important factor that increases the effectiveness of the pedagogical process. The author considers creative competence to be an integral part of professional training. Sh.S.Sharipov, studying the issue of the readiness of [3]future teachers for innovative activities, emphasizes the need to use interactive and reflexive methods in the educational process. His research points to creativity as a key source of pedagogical innovation.

The creative competence and educational forecasting also occupy an important place in the works of scientists from the CIS countries. For example, Russian scientists V.A.Slastenin and

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I.F.Isaev[4] gave scientific conclusions about the role of professional reflection and creative activity in the development of the pedagogical personality. According to their research, the teacher's work should be flexible in constantly changing conditions. E.F.Zeer [5]analyzes the trajectory of professional development in relation to the individual characteristics of the individual[5]. The scientist emphasizes the importance of taking into account future needs in forecasting the process of professional growth and puts forward scientific views close to the Foresight approach. A.K.Kusainov revealed the importance of [6]innovative and strategic planning methods in ensuring the quality of education[6]. In his works, long-term forecasts and scenarios are interpreted as important tools in the development of the education system.

In the studies of foreign scientists, Foresight methods and issues of creative competence are covered in a broader scientific context. In particular, Ju.R.Buldakova and etc.[7] analyzes foresight methods in pedagogical design of the university learning environment. According to him, a modern teacher must be able to consciously plan his professional path. A.Bourmistrov and B.Willy[8] analyzed the methods of creativity, activity and foresight. In their research, creative thinking is considered as a universal competence. The analyzed literature shows that, although the Foresight methods are scientifically sufficiently grounded in the development of creative competencies of future teachers and the organization of the educational trajectory, the issue of systematically introducing this approach into the pedagogical education system requires additional research.

The methodology of this article is based on competency-based, person-centered, and systematic approaches. In the research process, Foresight research methods were used as a tool for designing an educational trajectory aimed at developing the creative competencies of future teachers.

The methodological basis was the methods of analysis, comparison and generalization of scientific literature. Also, the elements of scenario development, expert assessment and reflexive analysis typical of Foresight were applied. These methods served to identify the visions of future teachers regarding their future professional activities and determine their individual development paths. The methodology of this scientific article allows us to consider the creative competencies of future teachers as a dynamic process. This creates conditions for organizing the educational trajectory not as a static, but as a flexible and developing system.

RESULTS

The results of this study confirmed that the educational trajectory organized on the basis of Foresight research methods has a positive effect on the development of creative competencies of

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future teachers. The results, based on elements of observation, reflexive analysis and self-assessment during the research process, showed that the Foresight approach serves as an important factor in the formation of professional awareness of future teachers. First of all, significant changes were observed in the level of creative thinking of future teachers. Planning the educational trajectory in relation to future needs encouraged students to take an unconventional approach to pedagogical problems. As a result, the participants developed their skills in independent decision-making and development of alternative solutions to problem situations. This is one of the main components of creative competence.

Foresight methods enhance the reflexive activity of future teachers. Students began to pay more attention to analyzing their professional capabilities, identifying strengths and weaknesses, and determining ways to develop them. This led to a conscious and goal-oriented organization of the educational process. This situation corresponds to the principles of person-centered education. Also, the individualization of the educational trajectory increased the motivation of future teachers for their educational activities. The scenarios and development directions developed on the basis of foresight were clear and understandable for students, encouraging them to take a responsible approach to their future professional activities. As a result, students began to evaluate their knowledge and skills not only in relation to current needs, but also in relation to long-term professional goals.

DISCUSSIONS

During the discussion, the results obtained were compared with the scientific views put forward by local and foreign researchers. In particular, it was found that the conclusions of scientists who interpreted creative competence as an important factor in professional development are consistent with the results of this study. The scientific ideas that the educational trajectory organized through foresight methods increases the readiness of teachers for innovative activities were practically confirmed. However, some limitations were also identified during the discussion. The introduction of foresight methods into the educational process requires certain methodological preparation and time. For some future teachers, activities based on forecasting the future initially seemed complicated. This indicates the need for a gradual and systematic introduction of the foresight approach. Also, the sufficient qualification of teacher-trainers in these methods is an important factor increasing the effectiveness of the process.

The indicate the feasibility of introducing Foresight research methods into the pedagogical education system. These methods, along with the development of creative competencies of future teachers, allow them to organize their professional development trajectory on a conscious and strategic basis. The results of the study can serve as a basis for developing scientific and practical recommendations for improving pedagogical education in the future.

CONCLUSION

This study revealed the scientific and practical significance of the educational trajectory based on Foresight research methods in developing the creative competencies of future teachers. The results of the study showed that the process of training teachers in the modern education system should not be limited to traditional approaches, but should be planned taking into account the needs of the future. The application of Foresight methods to the educational process forms a conscious and goal-oriented approach to the professional development of future teachers. The study revealed that this approach activates the creative thinking of future teachers, develops their ability to respond flexibly to problem situations, and enhances professional reflection. This confirms the need to consider creative competence as an important component of pedagogical activity.

Also, the individual educational trajectory developed on the basis of Foresight methods is distinguished by the fact that it increases the motivation of future teachers to their educational activities. Students have the opportunity to evaluate their knowledge and skills in relation to their future professional activities. As a result, the educational process is not static, but rather a dynamic and developing system. The results of the study indicate the need for a gradual

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introduction of Foresight methods into the pedagogical education system. In this process, the methodological preparation of teachers and the flexibility of the educational environment are of great importance. At the same time, the Foresight approach can serve as an effective strategic tool for introducing pedagogical innovations.

In conclusion, the educational trajectory based on Foresight research methods is an effective scientific and pedagogical solution for developing the creative competencies of future teachers. This approach will serve to improve the quality of pedagogical education and prepare teachers who will be competitive and innovative in the future. The results of the study can serve as a theoretical and methodological basis for future scientific research in this area.

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