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STRATEGY FOR DEVELOPING THE CREATIVE COMPETENCE OF FUTURE TEACHERS IN THE CONTEXT OF DIGITALIZATION BASED ON FORESIGHT TECHNOLOGIES

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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

In recent years, digital technologies have been rapidly developing in the educational process, creating new opportunities for students and teachers. At the same time, the issues of improving the quality of the pedagogical process, developing creative thinking and problem-solving skills are gaining urgent importance. Creative competence is the ability of a teacher not only to impart knowledge, but also to teach students to think independently and apply a creative approach. Foresight technologies are emerging as an advanced strategic tool in the training of future teachers. They allow for the prediction of future social and pedagogical problems, the development of innovative solutions, and the dynamic organization of the educational process. In this regard, the issues of designing the formation of creative competence of future teachers based on foresight technologies are of urgent scientific and practical importance. Effective strategies for developing creative competence in education, theoretical and methodological aspects of designing based on foresight technologies are analyzed. The main purpose of the study is to determine the strategy for preparing future teachers for creative thinking and innovative activities in the conditions of digitalization.

In the era of digitalization, the education system is undergoing a fundamental transformation. The widespread use of information and communication technologies and digital platforms has not only changed the form of the educational process, but also made it necessary to adapt the professional qualifications and creative competence of teachers to new requirements. In this regard, the development of creative competence in the process of training future teachers is considered an important factor in improving the quality of education in a digitalized pedagogical environment.

Creative competence is the ability of a teacher not only to convey knowledge, but also to teach students to think independently, to solve problems through a creative approach. It includes such skills as individual thinking, developing innovative solutions, and applying existing knowledge in new contexts. In modern education, creative competence allows you to improve the quality of the educational process, make lessons interactive and interesting, and also develop the creative potential of students. Therefore, it is relevant to form these skills on a systematic and strategic basis in the training of future teachers. Foresight technologies stand out as a tool that allows you to design the pedagogical process in new paradigms. Based on them, teachers will not

only be able to optimize existing pedagogical processes, but also to identify possible future problems in advance, develop innovative solutions, and align education with social requirements. Working on foresight technologies also helps the teacher develop the ability to think systematically, forecast, and make strategic decisions. At the same time, these technologies allow for individual and group adaptation of the learning process, the introduction of interactive methods, and the stimulation of creative activity.

The creative competence and foresight technologies is expressed through several main components. First, the level of creative thinking and innovative approach of the teacher. This component depends on the teacher's ability to develop new pedagogical ideas, enrich lessons with various methods, and use unconventional solutions in the learning process. Second, strategic forecasting skills. Foresight technologies allow the teacher to predict possible trends in the future educational process and develop appropriate pedagogical strategies. The third component is the creative approach to pedagogical design. This approach involves not only the content and form of the lesson, but also the organization of student activities in an interactive and motivational way. The main place in the formation of creative competence is occupied by pedagogical innovations and integration with digital tools. In the conditions of digitalization, the process of designing lessons is not only about imparting knowledge, but also becomes a complex activity aimed at developing students' creative and critical thinking skills. For example, interactive textbooks, simulation games, virtual laboratories and other digital resources enrich the learning process and allow the teacher to implement creative strategies. Therefore, combining the development of creative competence with foresight technologies in the training of future teachers is an important condition for the formation of an effective education system.

The occurs through a new design of the educational process, diversification of methodological approaches and enrichment of educational resources with innovative methods. In this regard, foresight technologies are of great importance as a means of forecasting pedagogical activities and implementing innovative solutions. They allow future teachers not only to master existing knowledge, but also to test new pedagogical ideas and develop creative strategies in the educational process.

The structural aspects of creative competence are classified as follows:

1. Creative thinking ability — applying existing knowledge and experience in a new context, solving problems through unconventional approaches.

2. Innovative activity skills - development and practical application of new pedagogical tools and methods.

3. Forecasting and strategic approach - identifying trends in the development of the educational process in advance and developing appropriate strategies.

4. Methodological flexibility - adapting to pedagogical situations and organizing the learning process in an interactive and motivational way.

These components, in combination, guide future teachers towards creative competence and ensure effective pedagogical activity in the context of digitalization. Foresight technologies serve as a strategically applied tool in this process, as they create the main theoretical platform for forecasting the future, individualizing the educational process and introducing pedagogical innovations. Also, the development of creative competence is associated with the social and cultural context in the modern pedagogical process. Future teachers should have the ability not only to use technological tools in a digitalized environment, but also to combine them with pedagogical goals. This requires the development of not only technical, but also pedagogical and social aspects of creative competence. The process of providing future teachers with creative competence is carried out through the integration of a digitalized pedagogical environment and foresight technologies. This allows improving the quality of the educational process,

encouraging students to think creatively and critically, and also developing pedagogical activity in new strategic directions. At the same time, creative competence prepares future teachers to make quick and effective decisions in complex pedagogical situations, adapts them to the requirements of modern education, and directs them towards innovative activities.

METHODOLOGY

In recent years, the role of creative competence and foresight technologies in the educational process has been widely discussed in pedagogical research. In theoretical sources, the concept of creative competence is analyzed from different approaches. Some researchers interpret it as a set of personal skills related to the creative activity of students, while others emphasize that it is associated with the ability of the teacher to take an innovative approach and the potential for strategic thinking. At the same time, in modern education, creative competence is seen not only as an individual talent, but also as a systemic skill capable of directing students to creative problem solving in the pedagogical process. Foresight technologies are considered in the theoretical literature as a comprehensive strategic tool. They allow not only to enrich the educational process with innovative approaches, but also to predict future trends. Studies show that the use of foresight technologies allows the teacher to dynamically plan the educational process, implement creative strategies, and adapt activities taking into account the individual needs of students.

K.Turdikulov[1] analyzes the theoretical foundations of the formation of pedagogical competence and creativity. They study the creative approach, educational content and the creative role of the teacher in the pedagogical process. M.Rakhimberganova[2] analyzes the processes of developing pedagogical competences in a digital educational environment, the use of digital tools and innovative methodological approaches. B.Jurayeva[3] analyzes the methods of developing pedagogical competences in traditional and modern educational conditions, the development of creative skills based on advanced pedagogical methods, design approaches and etc. N.Akhmedova[4] theoretically illuminates the formation of creative competence of future teachers using pedagogical technologies and explains the connection of creative competence with pedagogical technologies, methodological foundations and creative approaches in a digital environment.

John Metz Baer's[5] "domain specificity of creativity" approach demonstrates the need to study creative thinking in specific contexts and helps teachers understand strategies for developing creative competence.

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Literature analysis shows that creative competence and foresight technologies are considered as complementary structural elements. While creative competence is aimed at developing the creative and innovative abilities of the teacher, foresight technologies strengthen this process through strategic control and planning. In this regard, modern scientific sources emphasize the combination of these two elements in the process of training future teachers as an important condition for increasing pedagogical efficiency.

Based on a methodological approach, the research theoretically aims to identify effective strategies for integrating creative competence and foresight technologies in the pedagogical process. This will provide a conceptual basis for preparing future teachers for creative and innovative activities in a digitalized educational environment. The theoretical methodology also emphasizes that creative competence is not limited to individual skills, but is formed through the development of strategic, systematic and interactive aspects of the educational process. Foresight technologies serve as a means of planning this process in advance and implementing innovative strategies. At the same time, the methodology allows for the effective organization of a digitalized pedagogical environment and the systematic development of creative competence in the training of future teachers.

In general, the literature review and methodology section reveal the theoretical foundations of the process of guiding future teachers towards creative competence. At the same time, foresight technologies stand out as a theoretical tool for strategic and interactive planning of the pedagogical process. This approach allows for the scientific substantiation of the preparation of future teachers for creative and innovative activities in modern educational conditions.

RESULTS

The results of the study show that in a digital pedagogical environment, there are great opportunities to provide future teachers with creative competence. Theoretical analyses and literature show that creative competence not only serves to improve the quality of the educational process, but also plays an important role in developing students' creative thinking skills, solving problems through non-traditional approaches, and directing them to innovative activities. In this regard, the formation of creative competence in the training of future teachers is of strategic importance. Designing a pedagogical process based on foresight technologies theoretically creates new opportunities for the development of creative competence. Studies show that these technologies allow the teacher to predict possible future pedagogical situations, adapt the learning process individually and in groups, as well as introduce interactive and motivational methods. At the same time, foresight technologies serve as an effective tool for strengthening the skills of strategic thinking and creative approach of future teachers.

The results show that the development of creative competence is associated with the following main aspects: first, the creative and innovative abilities of the teacher; second, the ability to design the educational process in an interactive and flexible way; third, the ability to anticipate future pedagogical situations and develop appropriate strategies. Together, these components not only provide future teachers with knowledge, but also direct them to creative and innovative activities. Theoretical analysis shows that the development of creative competence occurs through the enrichment of the educational process with new methodological tools, the effective use of digital resources, and the organization of pedagogical activities in an interactive way. In this regard, foresight technologies are an important tool for planning the pedagogical process in advance and implementing creative strategies.

DISCUSSIONS

The discussions show that the combination of creative competence and foresight technologies provides several advantages in the process of training future teachers. First, teachers can adapt the learning process to individual needs and students' abilities. Second,

interactive and creative approaches make the pedagogical process interesting and effective. Third, the ability to make strategic forecasts and develop innovative solutions prepare teachers to make effective decisions in complex pedagogical situations. At the same time, the analysis shows that it is important to take into account a number of recommendations in the process of developing creative competence and applying foresight technologies. In particular, it is necessary to prepare future teachers to use digital tools, systematically develop pedagogical design and creative approach skills, as well as stimulate strategic thinking. This will improve the quality of the educational process and adapt future teachers to modern requirements.

During the discussion, it should be noted that creative competence is not limited to the development of individual skills. It is formed through the systematic, interactive and strategic organization of the pedagogical process. Foresight technologies are used as a means of forecasting this process and implementing innovative strategies. At the same time, it creates an opportunity to improve the quality of the pedagogical process, develop students' creative and critical thinking skills, as well as prepare future teachers for effective work in complex pedagogical situations. Orienting future teachers to creative competence and using foresight technologies is one of the important conditions for the effective organization of the pedagogical process in the modern education system. At the same time, this approach allows for the innovative, interactive and strategic enrichment of the pedagogical process, and gives effective results in adapting future teachers to the requirements of modern education and directing them to creative activity.

CONCLUSION

The further strengthened the importance of forming the creative competence of future teachers in a digital pedagogical environment. Theoretical analysis showed that creative competence includes such key components as the creative and innovative abilities of the teacher, strategic thinking and methodological flexibility. These components allow for the qualitative organization of the educational process, the development of students' critical and creative thinking skills, and the implementation of pedagogical activities in innovative directions. Foresight technologies serve as a strategic tool in this process. They allow the teacher to predict possible future pedagogical situations in advance, adapt the educational process individually and in groups, and implement interactive and creative methods. In this regard, the combination of creative competence and foresight technologies is considered an effective way to adapt future teachers to modern educational requirements and prepare them for effective work in complex pedagogical situations.

The results of the study also show that enriching the pedagogical process with digital resources, introducing innovative strategies, and organizing the learning process interactively increases the opportunity to develop the creative potential of future teachers. This serves to improve the quality of the modern education system, implement pedagogical innovations, and stimulate the creative approach of students. As a result, providing future teachers with creative competence and using foresight technologies in the pedagogical process is of strategic importance. This approach serves to improve the quality of education, effectively organize the pedagogical process, and train innovative teachers adapted to the modern pedagogical environment. At the same time, the combination of creative competence and foresight technologies forms the theoretical and practical basis for developing the educational process in a dynamic, interactive, and innovative way.

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