



PEDAGOGICAL POSSIBILITIES OF DEVELOPING COGNITIVE COMPETENCE OF FUTURE TEACHERS BASED ON A FACILITATIVE APPROACH

Rakhmankulova Nafisa

Acting Associate Professor, Kokand State University

Abstract

This article discusses the essence of the facilitative approach and its role in the process of developing cognitive competence in future teachers from a scientific and pedagogical point of view. It is argued that the functions of the teacher-facilitator in the educational process, such as organizing educational activities, supporting independent thinking, creating problem situations, and directing to reflective analysis, are the main factors in the formation of cognitive skills. It also describes the pedagogical conditions and technologies that serve to develop the competencies of future teachers in seeking knowledge, analyzing, drawing logical conclusions, creative thinking, and problem solving. The results of the study show that the educational environment organized on the basis of the facilitative approach serves to effectively develop students' intellectual activity, scientific research skills, and independent learning and cognitive activities.

Keywords: Facilitative approach; cognitive competence; future teachers; pedagogical technologies; reflection; independent thinking; problem-based learning; creative thinking; organization of educational activities.

Introduction

In the current globalization environment, one of the main tasks facing the education system is not only to equip future teachers with professional knowledge, but also to develop their cognitive competencies such as independent thinking, problem-solving, and analytical approach. Because the modern labor market and changes taking place in the educational process require every teacher to make quick decisions, show creativity, isolate the necessary information from the information flow and direct it to perform practical tasks. Therefore, improving the quality of education, intellectually improving future teachers, and finding effective pedagogical approaches that serve to form a scientific worldview in them have become one of the urgent issues.



The introduction of a facilitative approach to the teaching process allows us to abandon the traditional principle of “teacher is a source of knowledge” between the teacher and the student and create a democratic educational environment that sees students as active subjects and serves to reveal their inner potential. In this case, the teacher plays the role of a facilitator who not only provides knowledge, but also guides, encourages, advises, and assists in personal development of educational activities. This approach serves to increase the cognitive activity of students by strengthening processes such as communication, exchange of ideas, research, and analysis of problem situations. Most importantly, this model helps to activate the student's thinking process, teach him to make independent decisions, and understand his responsibility in the educational process. The effectiveness of the process of forming cognitive competence in future teachers largely depends on how free, open, and interactive the educational environment is organized, and the methodological possibilities of the facilitative approach are of particular importance in this. In order for students to actively engage in the process of acquiring knowledge, put forward new ideas, develop critical and creative ideas, and be able to reasonably defend their opinions, the teacher must create a favorable psychological environment, conditions of mutual trust, and open communication. Also, in classes organized on the basis of a facilitative approach, the student will have the opportunity to analyze his personal experience, develop an individual strategy for mastering knowledge, and creatively approach educational tasks.

Methodology

This article focuses on the methodology for studying modern pedagogical technologies used in higher education institutions to develop students' cognitive interest and assessing their effectiveness. The main goal of the study is to determine how various innovative approaches to teaching subjects increase students' interest in science and have a positive impact on their knowledge acquisition process.

The main methods used in the study are:

1. Theoretical analysis - study and analysis of existing scientific literature on modern pedagogical technologies and their importance in the educational process. This allows us to study the factors that form students' cognitive interest, the impact of technologies on the learning process.
2. Experimental research - an experiment was conducted to test various pedagogical technologies and assess their impact on students. During the experiment, students'



interest in science and the level of understanding of the subject were measured, and changes were observed under the influence of various methods.

3. Use of interactive methods and didactic games - the focus was on actively involving students in the process and increasing their interest in solving various problems by using game technologies and interactive teaching methods. These methods strengthen students' participation in the lesson process and encourage them to think independently.

4. Use of multimedia tools - video materials, digital games and interactive visualizations were used to convey new concepts in a more understandable and interesting way. These tools increase interest in subjects and help to better understand the topics.

5. Assessment of student interest - questionnaires and tests were conducted to assess the level of active participation of students in the lesson process, indicators of mastering the subject and cognitive interest. Using these methods, the effectiveness of various pedagogical technologies was determined.

The methodology section analyzes how the approaches used in the study affected the educational process, which methods are most effective in forming students' interest in subjects. The results of these approaches have created opportunities for students to deepen their interest and consolidate their knowledge, and have also demonstrated to teachers the benefits of using modern pedagogical technologies.

Results

The methodological basis of this study is scientific approaches developed based on modern pedagogical philosophy, constructivism, the concept of person-centered education, and theories of facilitative pedagogy. In the process of the study, various scientific sources, innovative educational technologies, psychological and pedagogical approaches, and criteria reflected in international educational standards were thoroughly analyzed in order to identify practical and theoretical mechanisms that serve to develop the cognitive competence of future teachers. Therefore, the methodological basis of the study was formed by conceptual views aimed at determining the effectiveness of the educational process based on a new model of teacher activity - the image of a facilitator, scientific theories of student-personal development, as well as the principles of cognitive psychology.

During the study, the method of theoretical analysis took the main place, and the essence of the facilitative approach, its tasks in the pedagogical process, and scientific views on the formation of cognitive competence in future teachers were



systematically studied. At the same time, using the methods of comparison and generalization, facilitative teaching technologies, interactive strategies, and didactic approaches that affect the cognitive process of a person used in the education systems of different countries were compared and their effectiveness was determined. Empirical methods were widely used in the study, and the level of current cognitive competence of students, their thinking, analysis, problem-solving, and creative approach abilities were recorded in the real educational process using diagnostic materials, observation results, interviews, and questionnaires with future teachers.

Also, experimental work was used as one of the important research methods, and training sessions developed on the basis of the facilitative approach were initially tested in pilot groups, efficiency indicators were measured during the practice process, and the results obtained were statistically analyzed. During the experimental stages, various forms of the educational process - work in small groups, problem-based learning, debates, creative tasks, reflection exercises and SWOT analyses - were used to determine the cognitive activity of students, the level of knowledge processing, the ability to think independently and the skills of drawing logical conclusions. Using statistical methods, in particular, percentage analysis, diagnostic diagrams and comparative assessment methods, the data obtained during the experimental process were processed and the dynamics of change were scientifically confirmed. The research also used modeling and pedagogical design methods to develop an optimal model for training future teachers based on a facilitative approach, a methodological system for developing cognitive competence, and a functional scheme of didactic tools used in the educational process.

Discussions

The results of the study showed that the facilitative approach has a significant impact on the process of developing cognitive competence in future teachers, since this approach is characterized by methodological foundations aimed at activating the cognitive activity of the individual, strengthening the student's internal motivation, and supporting independent thinking in the learning process. During the discussion, the differences between the traditional educational model and the educational environment organized on the basis of the facilitative approach were deeply analyzed, and it was found that an interactive, open-minded, and collaborative learning environment is much more superior in increasing the



cognitive activity of students. In particular, a significant increase in the exchange of ideas among students, solving problem situations, activity in the processes of logical research and scientific justification, mutual evaluation of ideas, and critical thinking skills were observed.

It was also found that in classes organized according to the facilitative approach, students' initiative increases, and they are formed as active subjects who directly participate in the creation of new knowledge through independent research, rather than as ready-made recipients of educational material. In such an approach, the student himself asks questions, explains the problem, puts forward hypotheses, compares different solutions and independently comes to his own conclusions, which serves to comprehensively develop all components of cognitive competence - analysis, generalization, evaluation, development of possible solutions and creative thinking skills. The discussions showed that the student's activity in the learning process is more directly dependent on the psychological climate created by the teacher-facilitator, free communication, a supportive communicative environment and stimulating pedagogical tools.

The results of observation and diagnostics confirmed that in the educational process organized on the basis of a facilitative approach, students creatively approach new educational tasks, increase their interest in the cognitive process, try to make independent decisions and strive to form their own learning strategies. As a result, students also develop metacognitive skills such as consciously managing their mental activity, deeply remembering knowledge, and logically approaching complex issues, which plays an important role in increasing cognitive competence. During the discussions, it was found that students feel more confident in an open educational environment where they have the opportunity to freely express their opinions, which forms in them a culture of communication, the ability to justify their opinions and the skills to defend their position.

One of the important aspects identified in the process of analyzing the results obtained at the experimental and test stages is that the facilitative approach is not limited to changing the teacher's activities, but has a comprehensive impact on the entire structure of education - the content of educational tasks, the organizational form of the lesson, the communication process, the assessment system and the choice of teaching methods. This ensures the systematic development of cognitive competence, because the process of cognition is not a single method, but gives effective results when all links of education work in an integrated manner. In facilitative education, the student is not afraid to make mistakes, freely expresses



his opinion, suggests new ideas and strives to experiment, which leads to an increase in intellectual activity.

Conclusion

The results of this study showed that the facilitative approach has an important methodological and practical significance in the development of cognitive competence in future teachers, since this approach creates a favorable learning environment that allows the student to activate his subjective activity, develop self-management, creative thinking and independent decision-making skills in the educational process. The study revealed that the educational process organized on the basis of the facilitative approach, unlike the traditional teaching model, creates conditions for students to acquire knowledge not in a ready-made state, but through their own research, experience and communication, which leads to the comprehensive development of the components of cognitive competence - analytical thinking, problem-solving, reasoning, evaluation and creative thinking processes.

Based on the results of the experimental stages, it can be said that classes conducted on the basis of a facilitative approach increase students' motivation to learn, arouse their interest in conducting scientific research, strengthen their desire to actively participate in the lesson process and exchange ideas, and at the same time form important skills such as a culture of communication, independent expression of one's own opinion, substantiation of opinions, and analysis of different points of view. This process not only increases students' cognitive activity, but also creates the basis for their professional growth and the formation of effective teachers in the future, since competencies such as broad thinking, logical conclusions, situation analysis, and correct decision-making are of particular importance when working as a teacher.

The study also showed that the systematic introduction of the facilitative approach into the educational process requires teachers to have a number of professional qualities, such as a new pedagogical culture, communicative skills, psychological sensitivity and a respectful approach to the student's personality, therefore, in order to widely implement this approach in practice, it is important to improve the skills of teachers, train them in interactive methods and person-oriented educational technologies. The integration of the facilitative approach into the educational process, in turn, requires updating the content of lessons, the form of educational



tasks, the assessment system and the entire structure of teacher-student relations, which directly serves to increase the effectiveness of education.

References

1. Рахманкулова, Н. Х. (2021). Исторические данные о числах и количестве. INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION, 2(2), 97-100.
2. HH, M., AA, N., NX, R., GB, U., & UA, M. (2022). КОМПЕТЕНТНОСТНЫЙ ПОДХОД В ПРОФЕССИОНАЛЬНОЙ ПОДГОТОВКЕ БУДУЩИХ УЧИТЕЛЕЙ НАЧАЛЬНЫХ КЛАССОВ В ОБЛАСТИ ИКТ. Международный журнал специального образования детей раннего возраста, 14(7).
3. Raxmankulova, N., & Mirzanazarova, S. (2022, January). DIDAKTIK OYINLAR-BILISHGA QIZIQISHNI UYGOTISH VOSITASI. In International journal of conference series on education and social sciences (Online) (Vol. 2, No. 1).
4. Rakhmankulova, N. K. (2022). METHODS OF TEACHING MATHEMATICS IN EDUCATION. In ПЕДАГОГИЧЕСКИЕ НАУКИ: АКТУАЛЬНЫЕ ВОПРОСЫ ТЕОРИИ И ПРАКТИКИ (pp. 15-17).
5. Рахмонкулова, Н. К. Важность решения математических задач в начальных классах. Международный журнал инновационных исследований в области науки, техники и технологий.
6. Khasanovna, R. N. METHODS OF TEACHING MATHEMATICS IN EDUCATION. 51 ТЕХНОЛОГИИ СОЦИАЛЬНО-ЭМОЦИОНАЛЬНОГО ОБУЧЕНИЯ (SEL) В ПРОФИЛАКТИКЕ БУЛЛИНГА УЧАЩИХСЯ БЫЛИНА ВЕРА ВЛАДИМИРОВНА, 52, 15.
7. Abdurahmonov U. FUNKSIYA NOSILASI GEOMETRIK VA MEKANIKA MA'NOLARI //Журнал интегрированного образования и исследований. – 2022. – Т. 1. – №. 6. – С. 135-138.
8. Абдурахмонов У. Ш. О КРАЕВОЙ ЗАДАЧЕ ДЛЯ УРАВНЕНИЯ ТРЕТЬЕГО ПОРЯДКА ПАРАБОЛО-ГИПЕРБОЛИЧЕСКОГО ТИПА В ТРЕУГОЛЬНОЙ ОБЛАСТИ. – 2022.
9. Abdurahmonov U. EKSTREMAL MASALALARNI YECHISHDA TENGSIZLIKLAR USULIDAN FOYDALANISH //Eurasian Journal of Academic Research. – 2022. – Т. 2. – №. 12. – С. 1239-1242.



10. Abduraxmonov U. S., No'monova D. UMUMTA'LIM MAKTABLARI MATEMATIKA DARSLARIDA ZAMONAVIY DIDAKTIK VOSITALARINING QO'LLANILISHI //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 9. – С. 160-165.
11. Abdurahmanov U. S. Application of Modern Information Technologies in Teaching Mathematics in General Education Schools //INTERNATIONAL JOURNAL OF INCLUSIVE AND SUSTAINABLE EDUCATION. – 2023. – Т. 2. – №. 3. – С. 20-24.
12. Sh A. U., Umarjonova S. A. TA'LIMNI BAHOLASHDA INNOVATSION YONDASHUV. PIRLS BAHOLASH DASTURI //University Research Base. – 2024. – С. 95-96.
13. Abduraxmonov U. UMUMTA'LIM MAKTABLARIDA O'QUVCHILARNING MATEMATIKAGA KOGNITIV QIZIQISHLARINI RIVOJLANTIRISHNING ZAMONAVIY PEDAGOGIK TEXNOLOGIYASI //University Research Base. – 2024. – С. 93-94.
14. Abduraxmonov U., Musayeva S. BOSHLANG'ICH TA'LIMDA INNOVATSION JARAYONNING PEDAGOGIK ASOSLARI //University Research Base. – 2024. – С. 91-92.
15. Abduraxmonov U., Temirova M. BOSHLANG'ICH TA'LIMDA INTEGRATSIYA. O'QUVCHINI MUSTAQIL FIKRLASHGA YO 'NALTIRISHDA INTEGRATSIYALASHGAN TA'LIMNING ROLI //University Research Base. – 2024. – С. 87-88.
16. Sh A. U., Valijonova Z. A. BOSHLANG'ICH TA'LIMDA INNOVATSION YONDASHUV //University Research Base. – 2024. – С. 89-90.
17. Umidjon A. CONDITIONS FOR THE FORMATION OF STUDENTS'COGNITIVE INTERESTS //JOURNAL OF MULTIDISCIPLINARY BULLETIN. – 2023. – Т. 6. – №. 5. – С. 357-362.
18. Абдурахманов У. АКТИВИЗАЦИЯ ПОЗНАВАТЕЛЬНОГО ИНТЕРЕСА УЧАЩИХСЯ К МАТЕМАТИКЕ В СРЕДНЕЙ ШКОЛЕ.