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USE OF HEURISTIC METHODS IN IMPROVING THE EDUCATIONAL PROCESS

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ABOUT ARTICLE

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Abstract. The integration of heuristic methods in education has proven to be an effective approach in fostering critical thinking, problem-solving, and independent learning among students. Unlike traditional, directive methods, heuristic techniques encourage exploration, self-directed inquiry, and the development of unique solutions. This article examines the role of heuristic methods in improving the educational process, highlighting their impact on student engagement and cognitive development. Through a review of recent studies and practical applications, this paper demonstrates how heuristic strategies support knowledge retention and adaptability, thereby equipping students with the skills necessary for real-world challenges. The findings underscore the value of heuristic methods as transformative tools that enhance not only academic achievement but also lifelong learning skills.

INTRODUCTION

In today's rapidly evolving educational landscape, fostering critical thinking and problem-solving skills has become a primary goal. Traditional teaching methods,

while effective in foundational learning, often fall short in encouraging students to explore concepts independently and develop their unique analytical capabilities. Heuristic methods, which emphasize discovery-based learning, offer an alternative approach that can transform the educational process. By guiding students to form hypotheses, experiment, and analyze outcomes, heuristic strategies encourage active engagement and enable learners to internalize knowledge more profoundly.

Heuristic methods not only align with modern educational objectives but also cater to diverse learning styles, making them adaptable across various subjects and age groups. This article explores the impact of heuristic methods in enhancing the educational experience, examining both their theoretical foundations and practical applications. By analyzing case studies and recent research, we will assess how heuristic techniques can empower students to become independent thinkers, improve problem-solving skills, and adapt to the demands of an increasingly complex world.

MATERIALS AND METHODS

The fundamental reforms implemented in the Republic of Uzbekistan are the selection of a unique socio-political and economic development path in the society, as well as continuous education in accordance with world education standards based on the idea and requirements of the "National Personnel Training Program". created favorable conditions for the formation of the system. The state policy in the field of education is recognized as one of the priority directions for the development of social society. Among the important activities to be carried out in this direction, the tasks of forming a new generation of specialists, morally and morally mature, independent worldview, creative thinker, rich national heritage, as well as universal and national values are defined. It is an urgent problem to form a person who fully meets the requirements of the reforms implemented in society, is resistant to competition in the production sector, can adapt to sudden changes, and also works effectively at the level of the requirements for the qualifications of specialists in the labor market. Despite the creative work carried out in the field of education and a number of positive changes achieved, it is necessary to further accelerate the dynamics of the development of educational efficiency, to effectively use the conditions and

opportunities created in this, to prepare competitive specialists for vocational colleges - future teachers. delivery is the most pressing issue today. The use of heuristic directions in the improvement of the educational process is inextricably linked with the formation of the professional competence of future teachers at a high level in the higher education system. Therefore, it is determined that one of the urgent tasks is to create the theoretical and practical foundations of the process of formation of professional competence in the educational process based on the effective use of the opportunities of modern educational technologies and the created educational methodological complexes. In this regard, the scientific justification of new approaches that ensure the level of professional competence required for the training of future teachers in a higher education institution is an urgent task.

The use of heuristic orientation methods in the improvement of the educational process allows one to continuously enrich one's knowledge, learn new information, feel the demands of this day and age, the ability to search for new knowledge, process it, and apply it in one's practical work. requires A specialist who uses heuristic methods in the process of education knows how to use the methods and methods that he has mastered in solving problems, which are suitable for this particular situation, selectively applies the methods that are suitable for the current situation, and rejects those that are not appropriate acquires skills such as critical thinking.

RESULTS AND DISCUSSIONS

All specialty subjects taught in higher education institutions are mainly not limited to the information-giving, teaching function, but also have the function of developing, integrating, and educating the mind. It can be seen from this that each subject teacher has the task of not only equipping students with the scientific information available in the structure of this subject, but also the development of the scientific concepts they have acquired and their integration with other concepts, as well as the tasks of educating students in the spirit of national values. placed Therefore, it is advisable for every teacher to choose the educational material in accordance with the above-mentioned requirements and principles in preparation for

the next training session, and to make effective use of relevant concepts when bringing it to the attention of students.

The formation of heuristic methods in the higher education system depends on its place in society, obligations and tasks in the higher educational institution of pedagogy, and individual abilities. The creative individuality of a teacher is determined by the level of development of his individual characteristics (scientific content of thinking, creative approach to work, striving to realize his potential, etc.). Feeling the conflict of psychological and pedagogical conditions for the development and improvement of the creative individuality of the future professional science teacher, and finding their solution is manifested in the composition of professional qualities such as originality and appropriateness.

There is a need to improve the system of activating the cognitive processes of young people through a new form of heuristic method of training, which forms the motivations of young people to learn, and to develop and implement mechanisms for managing the quality of the educational process through a system of indicators. These are the things that require the content modernization of the continuous education system, taking effective measures to raise the effectiveness of education to a new level of quality. One of the priority tasks of education is to establish national and universal values in the consciousness of the learner, to prepare the ground for students to actively enter social and economic relations with the formation of practical life skills in order to find their rightful place in society in the future. From this point of view, in the educational process, heuristic education is one of the main tasks of not only imparting knowledge to students and young people in subjects, but also directing the formation of skills to apply the acquired knowledge and skills and use them in everyday life.

Thus, we can come to the conclusion that the use of heuristic teaching methods can be used to develop this type of cognitive activity among students in a goal-oriented manner. We believe that a person's intuition and perception depend to a large extent on the intellectual aspect, the level and content of a person's knowledge, a person's instructions, interests, general orientation and previous experience. The

condition for the active activities of students and the formation of their professional awareness is the need to properly organize the educational process. During the implementation of practical tasks, it is necessary to control the students' understanding of the intended material, to look for ways to improve the perception of the complex material of the entire audience and each student individually and depending on the level of preparation, to form the educational knowledge, activities and needs of the students.

CONCLUSION

The adoption of heuristic methods in education marks a significant step forward in preparing students to navigate the complexities of the modern world. By shifting away from traditional rote-learning approaches, heuristic strategies empower students to become active participants in their own learning journey. These methods encourage curiosity, foster independence, and build essential problem-solving skills, all of which contribute to a deeper and more lasting understanding of subject matter. Heuristic methods not only enhance academic achievement but also promote a mindset of continuous learning and adaptability, which are crucial for success beyond the classroom. As educators continue to incorporate these strategies, students gain invaluable tools for critical thinking and resilience, equipping them to face real-world challenges with confidence. The implementation of heuristic approaches thus represents a transformative opportunity for educational institutions, reinforcing the role of education in developing capable, innovative, and self-sufficient individuals.

In conclusion, it should be noted that the unique aspects of the heuristic teaching process discussed above show that creative activity plays a major role in the formation of heuristic teaching of teachers in the higher education system. . Creative activity is the student's ability to correctly solve problems encountered in the course of his professional activity by mobilizing attention, observation, emotion, perception, memory, thinking, imagination, will and other processes. Therefore, based on the above ideas, the heuristic educational process is the task of the teacher to organize the students' activities in such a way that they apply the knowledge they have acquired from general professional and specialized subjects as much as possible, to form the

skills of students to perform the assigned tasks. mobilization. At this stage, the process from explanatory notes, working material drafts to the end serves to improve students' intellectual potential.

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