

MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL

<http://mentaljournal-jspu.uz/index.php/mesmj/index>



METHODS OF EFFECTIVE USE OF HEURISTIC TASKS IN DEVELOPING PROFESSIONAL COMPETENCES OF STUDENTS

Gayrat Kodirov

Independent Researcher, Associate Professor

ABOUT ARTICLE

Key words: future teacher, professional competencies, professional knowledge, use of heuristic tasks, heuristic approach, heuristic tasks, heuristic didactic tools, cooperation and communication.

Received: 11.08.23

Accepted: 13.08.23

Published: 15.08.23

Abstract: This article presents information about the type of pedagogical methods and the possibilities of using heuristic tasks in the development of professional competence of future teachers. There are also specific recommendations on the use of productive methods of professional activity when using heuristic tasks, creative development of professional knowledge, design and presentation of the educational process, the use of new forms of pedagogical activity and achieving its productivity, reflection and forecasting of one's own pedagogical activity, identification and improvement of gaps in them based on the analysis of pedagogical situations.

INTRODUCTION

Heuristic tasks are used in order to create experience of creative activity in future teachers. For this purpose, didactic situations are created that help future students to show their creative activity in pedagogical processes aimed at specific goals. Heuristic tasks serve to create a favorable situation for presenting information to future students in a systematic way. Future teachers will have the opportunity to learn this information and apply it in their practical activities. In the process of performing heuristic tasks, future teachers will have a favorable environment for applying the experience of creative activity.

They use didactic tools, methods and methods necessary for the future teachers to apply the experience of creative activity. The main goal of working on heuristic assignments in pedagogical processes is to form the competencies of inquisitiveness and creative activity in future teachers. In the process of applying heuristic assignments, professors and teachers use methods, methods and technologies required by the didactic process. In the process of performing heuristic tasks, future

teachers perform productive educational activities of a creative nature. Because in the process of performing heuristic tasks, future teachers refer to many didactic tools and activity methods. These didactic tools enable future teachers to perform a number of types of professional activities, including planning the learning process, choosing didactic tools, designing pedagogical situations, diagnosing and evaluating students' mastery levels, and reflection.

MATERIALS AND METHODS

Heuristic assignments imply the goal of professional personal development of future teachers by creating favorable conditions for them to acquire professional competencies. Heuristic tasks in specially organized pedagogical processes create favorable conditions for the activation of professional knowledge acquired by future teachers. Therefore, with the help of such tasks, the future teacher's opportunities for creative activity are expanded.

In the process of using heuristic tasks, future teachers will activate the acquired professional knowledge and will be able to use different methods of working on heuristic tasks. Heuristic assignments serve to form professional creative activity in future teachers. A number of professional competencies are formed in students with the help of heuristic findings. They are: using productive methods of professional activity, creative assimilation of professional knowledge, designing and presenting the educational process, using new forms of pedagogical activity and achieving its productivity, being able to reflect and predict one's own pedagogical activity, identifying and improving gaps in them based on the analysis of pedagogical situations development of specific recommendations.

Heuristic assignments make it easier for future teachers to reflect and clearly see the results of their creative activities. In this process, future teachers should understand the effectiveness of the application of professional knowledge, the ability of information to develop professional activity. These competencies are formed as a result of systematic work on heuristic tasks. Heuristic assignments allow future teachers to choose specific methods in pedagogical situations focused on creative activity. These methods provide opportunities for future teachers to complete assignments. All the methods used by future teachers make it easier to perform heuristic tasks and give creative spirit to the educational process. In addition, heuristic assignments help to justify the pedagogical aspects of professional problems for which a solution is sought. For this, teachers are required to acquire professional information, pedagogic knowledge, a scientific idea about the methods of their creative assimilation, and start solving tasks with the help of concrete evidence. Activation of pedagogical knowledge is required in the process of solving heuristic tasks. This, in turn, creates favorable conditions for developing the professional competence of future teachers, expanding the possibilities of using inductive and deductive methods, and logically thinking about existing

problems. In the process of performing heuristic tasks, it is effective to work in pairs, to use project technologies.

In the process of performing heuristic tasks, it is necessary to create an opportunity for future teachers to use heuristic methods. When choosing heuristic tasks for prospective teachers, it is important to focus on the level of motivation of students to search. In the process of performing heuristic tasks, future teachers should focus on developing hypotheses and evaluating the results of creative activity.

In the process of performing heuristic tasks, future teachers can put forward several hypotheses. Professors and teachers are required to analyze all these assumptions. For this, future teachers should have the opportunity to independently use the acquired professional knowledge. At the next stage of the pedagogical process, it is required that the pedagogical ideas put forward by themselves discuss the hypotheses as a team, engage in debate situations, and defend their ideas.

Among the professional competencies that need to be formed in future teachers is the competence of designing pedagogical processes. Designing pedagogical processes implemented in general secondary schools with the aim of obtaining a guaranteed result is an important component of the teacher's creative and professional activity. Because the design of pedagogical processes implemented in general secondary schools is a complex didactic phenomenon of a creative nature. The design of pedagogical processes incorporates a number of didactic features.

The design of pedagogical processes is carried out in 3 stages:

- a) creating a model of the pedagogical process;
- b) development of a pedagogical process project;
- c) construction of the pedagogical process.

In order to create a model of the pedagogical process, the future teacher should imagine the educational process as a whole and cover all its components in the model. This model shows the main means, methods and methods of achieving a guaranteed result. The main, intermediate, and final goals of the educational process, tasks, used didactic tools, methods and methods are fully covered.

And in developing the project of the pedagogical process, they effectively use the developed model. Because it is the second important stage of modeling, developed projects are a convenient form of organizing the pedagogical process.

In the construction of the pedagogical process, the pedagogical system is covered, it is the final stage of the design. Each project consists of specific components. Pedagogical process projects are implemented in pedagogical practice with the participation of educational process subjects.

RESULTS AND DISCUSSIONS

We will discuss each of these steps below. Any pedagogical activity begins with goal setting. Including the activity related to the modeling or design of the educational process, it is necessary to

determine the educational and educational development goals of the process. The purpose of the pedagogical process is to provide knowledge, approaches, concepts and models related to the professional and personal development of students and the formation of professional competencies in them. On the basis of this goal, the pedagogical process and the didactic tools used in it are selected, aimed at the professional development of students. Future teachers should have the ability to select the didactic tools, questions and assignments presented to the students by defining the goals and tasks in the design of the pedagogical process. Future teachers are required to consider the means and methods of pedagogical influence on students in this project. Based on the goal of the educational process, future teachers are required to be able to choose the means, methods, ways and methods of achieving the guaranteed result in an appropriate manner. Future teachers should acquire theoretical knowledge and practical skills related to the design, modeling, and construction of the pedagogical process in the process of mastering pedagogic subjects. Future teachers are required to have a clear idea of the theoretical knowledge that students will acquire, with a thorough analysis of school curricula. It is appropriate for future teachers to allocate a special place to heuristic tasks in educational process projects. In addition to pedagogical knowledge, future teachers are required to carefully consider the possibilities of students, and to design assignments and didactic situations based on this. This model allows future teachers to clearly imagine the pedagogical process and predict its results. The next step in the design of pedagogical processes is the creation of didactic projects. At this stage, a project based on the model is formed. This project is put into a convenient form for use in the pedagogical process. Pedagogical process models formed as heuristic tasks indicate that future teachers have acquired experience of creative activity. Any model of the pedagogical process is considered a product of creative activity of future teachers and is created as a result of heuristic actions.

CONCLUSION

The final stage of creating a project of the pedagogical process represents the activity of detailing or construction. Constructions of the pedagogical process serve to divide didactic projects into certain parts. As a result, it becomes easier to use these projects and organize the pedagogical process based on them. The future teacher's creative design activity shows the extent to which his knowledge of the methodology has been formed.

REFERENCES

1. Law of the Republic of Uzbekistan dated September 23, 2020 "On Education" No. ORQ-637. <https://lex.uz>
2. Decree No. PF-6097 of the Republic of Uzbekistan dated October 29, 2020 "On approval of the concept of development of science until 2030". <https://lex.uz>
3. Avaliani G.V. Heuristic methods in pattern recognition. - Tbilisi, 1988. - 45 p.

4. Averin V. A. Mental development of children of primary school age: Proc. allowance of St. Petersburg: Publishing House of Mikhailov V. A., 2000. - 64 p.

5. Adizov B.R. Theoretical foundations of creative organization of primary education: Ped. science. doc. diss... - T.: 2003. - 320 p.

6. Batyaeva T.A. System-target approach in the application of heuristic techniques to teaching students to solve non-standard problems: Abstract of the thesis. diss. cand. ped. Sciences. - Kazan, 2000. - 26 p.

7. Safarova R.G. Computer-didactic support for the training of social sphere specialists at the university based on a cultural approach. International conference: Problems in the Textile and Light Industry in the Context of Integration of Science and Industry and Ways to Solve Them (PTLICISIWS-2022). 050009 Scopus, Web of Science indexed. <http://pubs.aip.org/aip/acp>

8. Safarova R.G. Possibilities of Approaching the Educational Process From the Point of View of Cultural Sciences. Miasto Przyszłości Kielce 2023. ISSN-L: 2544-980X. Impact Factor: 9.2 View of Possibilities of Approaching the Educational Process From the Point of View of Cultural Sciences (miastoprzyszlosci.com.pl)

9. Masharipova N.R. Pedagogical mechanisms of formation of critical thinking in students. International scientific and practical conference “Innovative development in the global science”/ 2023, Boston, USA. P 95-97. <https://doi.org/10.5281/zenodo.7111515>

10. Masharipova N.R. As a source of critical thinking in students of Amir Temur's activities. Best Journal of innovation in science Research and Development. ISSN 2835-3579. Volume:2Issue:6|2023www.bjisrd.com. p- 509-511.