

Methodology of Pedagogical Science

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Abstract: This article describes the professional training of a pedagogue, the study of methodology, the formation of the methodological culture of a future pedagogue, pedagogical research methods, methods of conducting research in the pedagogical direction.

Key words: Pedagogue, methodology, methodological culture, research, methods, professional training.

Science can develop only if it is conducted with new knowledge. In turn, scientific research is needed to collect and interpret ulama. The last one finds its connections in the set of theoretical principles, which have received the methodological name in science. Not only pedagogical practitioners, but also researchers often see behind the concept of "methodology" something (something abstract) that is far from real life and educational practice. At the same time, methodology is "a system of principles and methods of organizing and building theoretical and practical activities." Psychologist S. L. Rubinstein said, "Questions of big theories are practical questions of great importance along with this work. "To see a big theoretical problem from the truth means to see it in relation with the concrete issues of life."

The high level of professional training of a teacher consists in the presence of methodological culture. The main symptoms of this culture are manifested in the following:

- to understand the processes "reinforced" with the basic concepts that make up the conceptual framework of pedagogical sciences with the categories of philosophy;
- To understand various concepts of education as steps from abstraction to concreteness;
- learning to change pedagogical theories in the method of cognitive activity;
- focus on the genesis of pedagogical forms of the pedagogue's thinking and their "full creative" property;
- the pedagogue's understanding of the need to implement educational practice in the system of terms;
- striving to determine the integrity and consistency of pedagogical knowledge during the period of historical development;
- a critical attitude to the "self-evident" situations in relation to the arguments lying in the usual pedagogical plane of consciousness;
- reflection on the process and results of personal cognitive activity, as well as on the movement of thoughts of other participants of the pedagogical process on the initial conditions;
- reasonable denial of positions against science in the field of human knowledge;
- to understand worldview, humanitarian functions of pedagogy.

By studying the methodology, the teacher begins to think based on its principles and becomes principled. At the level of private scientific methodology, the unity of education and social policy, the unity of the approach, the expansion of the unified subject of education, mastering the principles of the priority of educational goals in the whole pedagogical process are of particular importance. Formation of the methodological culture of the future pedagogue is based on the understanding of the essence of

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the methodology of knowledge and the transformation of pedagogical processes. It is important to overcome the perceptions of methodology as a system of principles related only to the logic of scientific research, to reveal their importance for the daily practice of education and training, and to systematically improve the entire pedagogical process. The dialectical approach aimed at the formation of methodological culture in the future teacher includes a number of sequentially escalated links: students' ability to understand and solve the contradictions (conflicts) in the situations presented to them Aspirations: To reveal the ineffectiveness of the solution based on such experiments, common sense considerations, metaphysics of showing that the world is a one-way street;

- demonstrate ways to effectively solve problematic situations based on the requirements of dialectical logic;
- to summarize the work experiences carried out on the proposed tasks and the possibilities of transferring the mastered logic to various areas of pedagogical practice.

Pedagogical research methods.

The principles of educating a person, providing him with deep, thorough scientific knowledge in certain areas, the internal essence, communication and laws of the pedagogical process, which determine its objective and subjective factors, are methods of special examination and knowledge.

At the same time, scientific research conducted in the pedagogical direction in the Republic of Uzbekistan is based on a dialectical approach. Such an approach to determining the laws of the pedagogical phenomenon, reality and science is the common connection of the pedagogical phenomenon and process, their consistent, continuous development, the child's physiological development, which ensures the psychological and intellectual improvement of science, the meaning and role of contradictions in ensuring personal maturity. also recognizes the importance of dialectical categories. The implementation of pedagogical scientific research is a complex process that requires a certain period of time, has such characteristics as consistency, continuity, systematicity and a clear goal, and for its effectiveness, it is necessary to comply with a number of conditions. They are:

1. relevance of the problem and clearly defined topic;
2. correctly formulated scientific hypotheses;
3. tasks are correctly defined based on the research objective;
4. an objective approach to the system of research methods;
5. correct consideration of the age, psychological and personal characteristics of the respondents involved in the process of experimental work, as well as the laws of personality development;
6. pre-diagnosis of research results and mention of its results;
7. guarantee of research results.

In modern conditions, the following methods are used in conducting research in a pedagogical direction:

1. Pedagogical observation method.
2. Interview method.
3. Questionnaire method.
4. Interview method.
5. The method of analyzing the documents of the educational institution.
6. Test method.
7. Pedagogical analysis method.
8. The method of studying children's creativity.



9. Pedagogical experience method.

10. Mathematical-statistical method.

Pedagogical observation method. In the process of its application, based on the study of the process of educational work of educational institutions, the researched problem situation is determined, and at the end, information is obtained about the difference between the indicators included in the rule. Pedagogical observation is complex and has its own characteristics. The expected result can be achieved if the observation is carried out on the basis of a clear goal, continuously, consistently and systematically. The importance of this method will increase if the conducted pedagogical observation serves to improve the quality of education and to form the student's personality.

It is important not to make mistakes when organizing pedagogical observation. For this, the researcher is required to:

1. ownership of a clear goal in the process of observation;
2. systematic monitoring;
3. solving specific tasks at each stage of monitoring;
4. carefully study the essence of each case;
5. not to rush to conclusions.

Interview method. This method helps to enrich the information obtained in the process of pedagogical observation, to give a correct assessment of the current situation, to create pedagogical conditions that allow to find a solution to the problem, to involve the possibilities of subjects of experimental work in the solution of the problem. Interviews are conducted in individual, group and public form as appropriate. It is important to achieve the full manifestation of the respondents' capabilities during the interview process. In order for it to be effective, it is advisable to follow the following:

1. determining the content of the questions set for the interview based on the purpose and ensuring the logic and consistency between the questions;
2. clearly defining the place and time of the interview;
3. arriving at a certain stop in terms of the number of interview participants;
4. to have certain information about the interlocutor in advance;
5. having a sincere relationship with the interlocutor;
6. creating conditions for the interlocutor to express his thoughts freely and in detail;
7. achieving clear, short and clear questions;
8. timely analysis of received data.

Questionnaire method (French - check). Using this method, evidence collected during pedagogical observation and conversation is enriched. The questionnaire method is also based on the organization of communication with respondents based on structured questions. Answers to questionnaire questions, in most cases, are obtained in writing. Depending on the nature of the process being studied, the questionnaire questions will be as follows:

1. open type questions (questions that allow respondents to give free, detailed answers);
2. Closed type questions (respondents answer the questions by choosing answer options such as "yes", "no", "partially" or "positive", "satisfactory", "negative", etc.).

When using the questionnaire method, it is necessary to follow a number of conditions. They are:

1. questionnaire questions should serve to illuminate the nature of the problem under investigation;
2. questionnaire questions should not be large and vague;



3. questionnaire questions should be made based on the worldview, age and psychological characteristics of the student;
4. it is necessary to be able to guarantee the time that ensures full answers to the questions of the questionnaire;
5. it is necessary not to turn the questionnaire into a source of pedagogical and psychological descriptions of students;
6. Questionnaire answers must be carefully analyzed based on certain criteria.

The interview method ensures that the respondent reacts to the phenomenon that illuminates one or another aspect of the problem under investigation. The interview is conducted on the basis of referring a series of questions to the attention of the respondent. The reaction of the researcher to the questions received during the interview increases its effectiveness.

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