

PEDAGOGICAL DIAGNOSTICS IN THE EDUCATIONAL PROCESS OF THE UNIVERSITY: ESSENCE, OBJECTIVES, STRUCTURE AND NECESSITY

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Resume: the article examines the main scientific approaches to the essence of pedagogical diagnostics in the educational process of the university, discusses its goals, principles, functions, objects and subjects. An optimal diagnostic model is built on this basis.

Key words: pedagogical diagnostics, educational process of the university, goals of pedagogical diagnostics, educational environment.

INTRODUCTION.

Diagnostics and quality assessment are one of the most effective methods of modern pedagogical practice, an irreplaceable and necessary stage and at the same time a toolkit of innovative educational technologies.

The term "diagnostics" comes from the Greek words: dia - between, apart, after, through, time and gnosis - knowledge. From the components of these words, the term was formulated, which in the ancient world was called people who count the number of killed and wounded after the battle [1].

In the Renaissance, diagnosis was already a medical concept, meaning the recognition of a disease. In the XX century. this concept began to be widely used in philosophy, and then in

psychology, technology and other fields. In a general sense, diagnostics is a special kind of cognition located between scientific knowledge of the essence and the recognition of a single phenomenon. The result of such knowledge is a diagnosis, i.e. conclusion about the belonging of an entity, expressed in a single, to a certain class established by science.

METHODOLOGY. We use the method of generalization and analysis in our scientific research.

In pedagogy, diagnostics has changed its content. Psychodiagnostics assesses the personality and its individual aspects as relatively stable formations. Pedagogical diagnostics is aimed at the results of the formation of

the student's personality, the search for the causes of these results and the characteristics of the pedagogical process in the aggregate.

Results. For all its scientific and applied significance, the concept of “pedagogical diagnostics” does not have a clear, generally accepted definition. Some authors identify diagnostics with the control of learning outcomes or the ability to use certain control methods [2]. Others believe that the essence of pedagogical diagnostics is revealed through its functions. Thus, K.Intenkamp notes that pedagogical diagnostics is aimed at solving a triune task - this is: “1) optimize the process of individual learning; 2)... ensure the correct definition of learning outcomes; 3) to minimize the mistake ... when choosing a specialization of training”. Still others argue that diagnostics is a system that includes control, verification, evaluation of results, accumulation of statistical data, their analysis and prognostics [3, 8]. In terms of content, a description of the driving mechanisms of pedagogical diagnostics, methods of assessing the quality of teaching and learning can be found in the works of B.S. Gershunsky, E.A. Yamburg, V.A. Kalnei, S.E. Shishova. They believe that the need to diagnose the quality of teaching and learning is due to social, economic, general pedagogical and technological prerequisites. It seems that the latter are

contained in the main function of purposeful activity - obtaining the final “intellectual “product”” in accordance with the imposed quality requirements. In turn, the requirements and quality indicators determine what the final “product” and the technological process of its receipt should be.

ANALYSIS AND DISCUSSION. The main principles of pedagogical diagnostics are:

- complexity;
- continuity;
- integrity;
- objectivity;
- the dynamism of the study of pedagogical factors and phenomena;
- the validity of specific pedagogical diagnostic procedures in these conditions;
- the principle of determinism (causation);
- analysis and synthesis principle;
- the principle of the main link.

Levels of pedagogical diagnostics:

Level 1 - component diagnostics . By isolating individual components in an object and obtaining a characteristic of some of them, we carry out component diagnostics. It is considered the initial level of pedagogical diagnostics and gives an unreliable forecast, has a low practical return.

Level 2 - structural diagnostics . At this level of diagnostics, the structure of the

process is determined, the transition to the establishment of connections between the components, different degrees of dependence between the individual components of the pedagogical process are revealed. It becomes possible to put forward hypotheses that reveal different degrees of dependence between individual components of the educational process. The results of such diagnostics are closer to practical application.

Level 3 - system diagnostics. It allows you to determine the functions of individual aspects of the pedagogical process as an integral systemic phenomenon, as well as the development of this process. This level of diagnostics is the most complete. At this level, a complete picture of the connections between individual components is established, the task is to identify the relationships, it allows you to objectively track how the chain of pedagogical situations unfolds from the adoption of the goal to the achievement of the final result. At all levels of pedagogical diagnostics, it performs a certain function that is sufficient to achieve certain goals. The choice of the level depends on what result the teacher wants to get. Different tasks also imply different levels of pedagogical diagnostics.

The need for pedagogical diagnostics is due to social, economic, general pedagogical and technological

prerequisites. It seems that the latter (technological prerequisites) are contained in the main target function of the technology of purposeful activity - obtaining the final “intellectual “product”” in accordance with the quality requirements. M.M. Potashnik and V.P. Simonov convincingly proved that the diagnosis of existing educational problems and tasks is the basis for the effective functioning and development of an integral learning system. For example, M.M. Potashnik offers a kind of “diagnostic scheme” that reads “from end to beginning”. This way, according to the author of the “scheme”, “allows you to cut off possible areas of search for problems that are insignificant for the final result and leave ... only the most significant; thereby rationalizing the analysis process and “saving thinking””[4]. The implementation of this ‘scheme’ involves: analysis of the results, analysis of the process being processed, analysis of its resource provision (“conditions” according to M.M.Potashnik).

In other words, a certain system of indicators should be developed - an image (model) of an approach to solving the problem of diagnosing the assessment of the quality of educational processes and managing them. These indicators include:

- predictability, rationality, realism, integrity, controllability, sensitivity to failures (the first group of indicators);
- the effectiveness of the combination of models of management by targets with management by deviations; on the use of corrective actions in order to exclude them (deviations) (second group of indicators);
- the level of education, development, creativity (the third group of indicators);
- the parameters of the graduate in accordance with the predicted results, which include: readiness for professional activity, for further education, social activity (for the fourth group of indicators).

From this point of view, the system of diagnostics and quality assessment (training, teaching, management activities) must meet the following requirements:

1. To wear, in a certain sense, a methodological character, since it reflects a certain point of view, the principle of evaluative activity, and thereby orients to the search for results in a certain direction.
2. Should function only holistically, continuously, simultaneously.
3. It is impossible to select any (arbitrary) group of indicators from the proposed system and use only it. Otherwise, the whole analysis of quality will lead to formalism or will be simply useless. The mechanisms for

diagnosing the quality of training and the effectiveness of teachers' work proposed by V.P. Simonov. He based the diagnosis on "the nature of the relationship between the level of the teacher's requirements and the degree of training of his students". So control over the effectiveness of the results of the educational process can be carried out by identifying the degree of training, which, according to V.P. Simonov is characterized by five indicators: recognition, memorization, understanding, the simplest skills and abilities, transference. Particularly valuable in the proposed V.P. Simonov diagnostics should recognize the concept of the actual presence of three levels of requirements (high, medium, low) of the teacher, the method of numerical calculation of the "effectiveness of the teacher's educational activity", algorithms for overcoming the formalism that manifests itself in the process of his professional activity [5].

Modern pedagogical technologies, including the diagnosis of the success of the educational process, as an obligatory component, are considered primarily the ascertaining function of control, less often - correctional and prognostic, sometimes - educational. Of course, diagnostics in this form has a certain potential for optimizing the educational process and, to some extent, allows you to manage the quality of

knowledge in the light of their professional significance.

The foregoing is quite enough to try to formulate the object, subject and tasks of pedagogical diagnostics as a leading component of the system of professional training of students at a university.

The object of pedagogical diagnostics is all, without exception, the transitional quantitative and qualitative states of educational and cognitive processes occurring within the framework of an organized educational system, as well as the patterns identified in the process of developing an objective assessment of the quality of education at each stage of its management.

Its subject is quantitative and qualitative indicators of the results of the functioning of specially organized processes, the development of reliable tools for assessing this process and methods of its "implementation" into pedagogical reality.

The tasks that pedagogical diagnostics are designed to solve are as follows:

- in establishing the fact of theoretical, practical and psychological readiness of students at an arbitrary stage of training for further learning, professional and social activities;
- in identifying the motivational aspects of the personality of students, their needs, interests, styles of cognitive activity;

- in obtaining information about the level and nature of the cognitive actions of students, the degree of their training;
- in determining the performance indicators of the subjects of the educational process in accordance with the developed criteria and quality requirements for the final intellectual "product".

The content of the diagnosed information is determined in accordance with the goals of diagnostics based on the value approach to each section of educational information contained in state curricula (programs approved by the sectoral UMO as standard).

The value of the diagnosed information is determined, on the one hand, by the intra-subject significance of the sections and topics of the courses (internal connections), on the other hand, by the goals of training in this discipline, that is, by the inter-subject and practical significance (external connections). With regard to the personal qualities and characteristics of the participants in the educational process at the university, the content of the diagnosed information is determined on the basis of the requirements for their professional and personal qualities, profессиograms, psychological characteristics of professional activity. This problem, in our opinion, has a categorical

imperative and requires separate consideration.

The second aspect - how to diagnose - determines the content of the following structural components of the pedagogical diagnostics system in a non-state university:

- types of diagnostics;
- methods, methods and forms of diagnostics;
- diagnostic tools;
- subjects of diagnostics;
- diagnostic objects.

Diagnostic tools are diagnostic tasks: control questions, practical tasks implemented through various types, forms, diagnostic methods, corresponding, on the one hand, to the learning objectives, on the other hand, to the conditions for optimizing the diagnostic process (obtaining the highest efficiency with the least time and “energy” costs both on the part of objects and on the part of subjects).

Consequently, the content of diagnostics in a university is made up of various types, methods, methods and forms of pedagogical diagnostics; the volume and nature of diagnostic tasks; various psychological aspects of pedagogical diagnostics and a number of objective and subjective factors affecting the reliability and reliability of diagnostics (for example, the complexity of educational information and the difficulty of its assimilation), etc. The levels of requirements for the

objects of diagnostics in order to optimize the diagnostic process should be determined by the significance of the diagnosed information for a specialist of a specific profile. Taken together, this constitutes the system of pedagogical diagnostics at the university.

It is necessary to separately consider the effectiveness of technical (computer) means of pedagogical diagnostics - one of the main modern means of improving the process of pedagogical diagnostics at a university.

CONCLUSION. The most important problem of improving pedagogical diagnostics is its rational frequency, which allows obtaining continuous objective information about the state of training, the level of professional and personal development of students at the lowest cost (time and energy) and in accordance with this, timely necessary correction [6]. Thus, the specificity of the activity of the pedagogical diagnostics system as a subsystem of the pedagogical and educational system of the university and higher education in general is that all its components, focused on the goals of diagnostics, reflect the goals of training a specialist of a certain profile, aimed at the component “object of diagnostics”. It is him, the student, the diagnosed person that must be brought to a certain level of training, corresponding to the set goals.

Literature

1. Golubev NK, Bitinas BP Introduction to diagnostics of education. - M.: Pedagogy, 1989
2. Karpenko M.P. Modeling the rate of knowledge assimilation / M.P. Karpenko, E.V. Chmykhova // Proceedings of SSU. Issue 10. Ser. "Psychology and Sociology of Education". - M., 1998. - С. 3-15.
3. Cold MA Psychology of intelligence: paradoxes of research / M.A. Cold. - Tomsk: Publishing house of Vol. un-that; M.: Bars, 1997. -- 392 p.
4. Management of school development / Ed. MM. Potashnik, V.S. Lazarev. - M.: New school, 1995.
5. Simonov V.P. Pedagogical management. - M.: Pedagogical Society of Russia, 1999.
6. Тоджибаева К. С. К. Профессиональная педагогическая компетентность учителя: феноменология понятия // Вопросы науки и образования. – 2018. – №. 27 (39).