WAYS OF USING COMPUTER TECHNOLOGIES IN ASSESSMENT

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ABSTRACT

The article reveals the possibilities of using computer technologies in the educational process evaluation system. Special attention is paid to the review of the interdependence of the subjects and objects of assessment. Examples of the use of information technologies in the form of software tools are presented in accordance with the selected assessment objects.

Introduction: Among the many problems of guaranteeing the quality of higher education, the problem of creating and developing a system for evaluating the quality of the educational process is more important than ever. Its development is directly related to the development and effective use of multimedia, computer programs and other information technologies. The computerization of the educational process quality assessment system in higher education allows to change the entire system of informational, software and methodological support of the educational process (*searching for information materials, conducting assessments, processing assessment results, etc.*).

In order to determine what software materials should be used in the process of evaluating the quality of the educational process, it is important to define the goals and objectives of the higher education educational process quality evaluation system. In our opinion, it can be expressed through two subsystems: internal and external, they are interrelated, complement each other, complement each other. The objectives of the external subsystem of the evaluation of the quality of the educational process are as follows:

➢ *compliance of the content, level and quality of personnel training with the requirements of the State Education Standard;*

➢ *type and type of educational institution according to state accreditation indicators;*

➢ *compliance with socio-professional accreditation criteria;*

➢ *compliance of the conditions of the educational process with state and regional requirements;*

➢ *guarantees of a high, elite level of a certain educational program of a certain higher education.*

The goals of the internal subsystem of the evaluation of the quality of the educational process at the higher educational institution are the analysis of the activity of the higher educational institution and the sustainable development of higher professional education due

to the results achieved in relation to the model of activity improvement *(criteria set externally or developed independently by the university)* which includes maintaining a competitive level of high quality. Identifying the strengths of higher education activities and priorities for improvement in the field of ensuring the quality of the procedural aspect of the educational process (quality of planning and protection; quality of content; quality of teaching; quality of teaching technology) and university education the quality of the results of the resulting aspects of the educational process (the quality of the educational results; the quality of graduate training).[1]

In relation to the educational process in higher education, its quality assessment system is evaluated by the state, society, students, parents, teachers, employers in accordance with the requirements of *"result quality", "process quality", "education system quality".* It is designed to help establish, ensure, improve and maintain the necessary quality in all areas of the organization's activities. The system of evaluating the quality of the educational process in higher education serves its stable (*balanced*) development, ensuring the effectiveness of innovative activities in the field of competitive personnel training, and successful achievements in the labor market.

The leading directions of the evaluation of the quality of the educational process in education are determined by the conceptual and regulatory framework of the evaluation, which allows to check the principles, goals, parameters, criteria, indicators, indicators, content, evaluation technology. The conceptual basis of evaluation is a complex purposeful, dynamic system of theoretical-methodical and methodological-technological knowledge based on name systems, synergistic, process, subject-activity, socio-human-oriented, qualitative, competent and reflexive approaches. Each of the approaches performs a certain set of tasks, but does not solve the problems in general, which determines the need for their comprehensive development.

From the point of view of a systematic approach, management of the formation and development of evaluation is a system characterized by the following important features:

- *appropriateness, that is, the existence of the goal and purpose of the system we are studying;*
- *a complex hierarchical structure of the management of educational formation and development;*
- *the emergence of a management system for the formation and development of the evaluation system, the presence of integral features in it that do not arise from known (observed) features of the system;*
- *multi-connection of the control elements of the formation and development of the evaluation system, the interrelation between the subsystems at one level (horizontal) and different levels of the hierarchy (vertical);*
- *complex, interdependent relationships between the variables of the management system of the formation and development of the evaluation system, the change of one variable leads to the change of other variables;*

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[1] Azaryeva V.V. Methodological recommendations for the implementation of a standard model of the quality of an educational institution / V.V. Azaryeva, V. V. Yashchenko. St. Petersburg: Publishing house of St. Petersburg Electrotechnical University "LETI", 2006. 408 p.

- availability of information communication between management parts and subsystems, as well as external information communication with other systems;
- multiple criteria for evaluating the effectiveness of the system we are checking;
- changeability of content and programs (changeability of system content structure, connections and elements);
- the presence of disturbing factors, conflicting and competing parties, conflicting situations arising in the system of development and development management.

Based on the general characteristics of complex systems, the management system of the formation and development of the evaluation system is defined as real (*based on the origin*), social and personal (*based on the essence*), dynamic (based on variability), open (the nature of interaction with the external environment by), probabilistic (*by the method of determination*), purposeful (by origin). We included discreteness (on the level of impulsivity), non-systematicity (on the basis of proportional variability), value-oriented and pedagogical orientation to the specific features of the evaluation system's formation and development management system.

The process approach develops the ideas of classical management theory, enriching them with the ideas of the situational and behavioral approaches. This approach views management of system formation and development as a holistic process of performing management functions, as a set of interrelated and interacting activities that use resources and are managed to transform "inputs" into "outputs". allows output, and the output of one process directly generates the input of the next. The use of the process approach in the management of the formation and development of the assessment system allows to consider the continuity of management provided by the combination of individual processes in the process system, as well as their combination and interaction.

When using this approach, first of all, it defines the principles of determining management functions, choosing their implementation methods, building the structure of the management subsystem; second, it allows us to believe that the desired outcome is more effectively achieved when activities and related resources are managed as processes.

The synergetic approach is considered as the strategists of the internal system of the evaluation of the quality of the educational process of higher education. It consists in understanding it as an open, complex self-organizing system, recognizing the general laws of evolution of such systems. Applying a synergistic approach to managing the formation and development of the management system means that the most effective way is management through self-organization and reflection mechanisms. Applying the synergistic approach allows us to determine the qualitative changes in system behavior under the influence of non-linear external environment. This approach consists in considering society as a unit of education and socialism. In addition, a characteristic feature of the socio-human oriented approach is that it has a multidimensional nature, includes approaches to civilization, formation, and a historical-philosophical and sociological review of society. This allows us to take into account "all the complexity and realistic colors of the palette of social life.".[2] Society

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[2] Lapin N.I. Paths of Russia: sociocultural transformations. M.: Knowledge, 2000. 127 p.

can be studied as a contradictory unit that "comprises all possible combinations and complex tensions in the relationship between the individual, groups, and society."

The socio-human oriented approach works with a certain model of human quality, society's requirements for a highly educated person, to consider as a complex socio-cultural object, historically accumulated models, forms, allows to identify social programs of evaluation, behavior and communication of people, which ensure the transfer of tools, evaluation technologies, social experiences from generation to generation. It allows to determine the social constraints that inevitably exist in society and determines the resistance or acceptance of models of human quality, requirements for the system of human and State educational standards, innovations and innovations in assessment, management. With this approach, the polysubjective dialogic interaction of the subjects of the educational process is in the center of attention, and the nature of this interaction is considered as one of the decisive directions of social change. With the help of a socio-human oriented approach, permanent, stable foundations of education are distinguished, which determine the development of human quality and are defined as a given.

The qualitative approach allows to determine the practice-oriented tactics of the internal system of higher education educational process quality assessment. It consists of using the ideas of qualimetrics for maintenance. This approach is based on the conceptual rules and methods of pedagogy, measurement theory, modeling theory, and mathematical statistics considered in relation to each other. Its use allows for deterministic probabilistic and uncertain conditions to be evaluated based on qualitative and quantitative scales.[3]

A reflexive approach serves to form and develop a system of self-management with the quality of the educational process in higher education. It includes a systematic reflection of the components of the quality of the educational process (self-examination, self-evaluation, self-management). Competency-based approach provides an opportunity to model the results of the educational process and present them as norms of the quality of training of graduates based on competencies, as well as to evaluate the development of students' competencies. One of the options for determining the evaluation subjects is to distinguish the quality of the educational process from the point of view of consumers: internal consumers, direct external consumers and indirect external consumers.

The group of consumers of internal assessment includes applicants, students and their families, employees, including professors and teaching assistants, faculties providing educational programs, departments, management of other structural units, ma administration.

We include employers in the second group of direct external evaluation consumers. Teachers, administration, teaching and support staff of other educational institutions that accept graduates for further education. Assessment items can also be provided at different levels at the level of higher education, faculty, department, core curriculum, work program, teacher and student activities (internal assessment items). Once the evaluation objects are

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[3] Trainev V. A., Trainev I. V. Systems and methods of strategy for improving the quality of pedagogical education: generalization and practice. M.: Dashkov i K, 2006. 294 p.

identified, it is important to develop or use existing information technology (IT) software tools.

In assessing the quality of the implementation of basic educational programs, the heads of structural units, teachers use the services provided by the national accreditation agency in the field of education, and also develop test tasks using MS Excel, Adobe Flash, Moodle and other software tools.

To assess the quality of higher education activities, the quality of organization of the educational process, and the level of satisfaction with the life of students, diagnostic computer programs for quick questioning of students and teachers, developed with the help of Microsoft Access, MS Excel programs, can be used. Data from the student survey allows you to determine:

❖ *motivations for choosing a certain specialty, which is one of the main indicators of entering an educational institution and attitude to the profession;*

❖ *attitude of students to study (interest in learning, learning difficulties, striving for high results, self-evaluation);*

❖ *relationships in the student environment;*

❖ *the objectivity of teachers' perception of students' attitude to learning;*

❖ *evaluate their educational institution;*

❖ *professional directions (ideas about future work);*

❖ *leisure time hobbies and activities;*

❖ *meaningful stimulation of the educational activities of young people, who are being surveyed to tell professors-teachers which methods of educational work and the method of communication with students are effective;*

❖ *demands of students and young people to the personality of a modern teacher;*

❖ *students' satisfaction with their studies and educational situation; share of dissatisfied and disappointed. This information indirectly speaks about the reputation of the educational institution in the youth environment and can be used for a rough forecast of the future collection;*

❖ *characteristics of students' free time;*

❖ *system of life values of students;*

❖ *socio-demographic indicators;*

❖ *negative demonstrations in university activities;*

❖ *students' wishes to improve the quality of the educational process;*

❖ *attitude to specialties and professions;*

❖ *changes introduced by students to the educational system;*

❖ *attractive and unattractive aspects of the activity;*

❖ *educational behavior (attendance, notes, preparation for tests and exams, level of independence, etc.);*

❖ *assessment of knowledge acquired during education.*

Questioning of teachers on the computer program allows to get information about the evaluation of students' activities, their educational activities, the basics of educational activities (optimum teaching tools and methods), difficulties in teaching work, requirements for the teacher's personality, evaluation of the level of preparation of graduates, motivations

for participation in scientific and research work; external professional relations, socio-demographic indicators, etc. Evaluation of the quality of educational and extracurricular work with students can be done using computer technologies.

Conclusion: Assessment of the quality of mastery of the basic educational program is carried out using the ratings of the system, which is carried out by an automated computer program developed using MS Excel. In monitoring and evaluating the quality of the educational process, teachers use mathematical methods using available practical packages (*MS Excel to MathCad, Mathlab, Mathematics, Statistics, SPSS, Derive, etc.).*

Thus, the level of development and implementation of information technologies, the availability of versatile software allows for a quick and economically systematic assessment of the quality of the educational process of higher education, as well as the management of the quality of the educational process.

References:

1.   Azaryeva V.V. Methodological recommendations for the implementation of a standard model of the quality of an educational institution / V.V. Azaryeva, V. V. Yashchenko. St. Petersburg: Publishing house of St. Petersburg Electrotechnical University "LETI", 2006. 408 p.

2.   Lapin N.I. Paths of Russia: sociocultural transformations. M.: Knowledge, 2000. 127 p.

3.   Trainev V. A., Trainev I. V. Systems and methods of strategy for improving the quality of pedagogical education: generalization and practice. M.: Dashkov i K, 2006. 294 p.