ORGANIZATION OF MONITORING IN THE QUALITY MANAGEMENT SYSTEM OF THE EDUCATIONAL PROCESS WHEN TRAINING OF SPECIALISTS

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Abstract

Purpose: The problem of the quality of education concerns not only Russia but also the entire world community. Many developed countries are concerned about the current state of education and are trying to improve their quality. One of the leading trends in the modernization of education in Russia is increasing attention to the problem of improving its quality, which requires the development of conceptual approaches to finding ways to solve it.

Methodology: In pedagogical terms, the quality of education is considered from two positions: firstly, as the degree of compliance of the educational system with the established requirements and the quality of educational services provided by the educational institution; secondly, as the effectiveness of the educational process that meets the needs of social customers not only in terms of assimilation of a certain amount of knowledge by students, but also the development of their personality, cognitive and creative abilities.

Result: The choice of an actual and effective educational program is interesting not only for the consumer but also for the educational organization (institution), as it is a quality program in many sectors of education that affects the competitiveness of the educational organization.

Applications: This research can be used for universities, teachers, and students.

Novelty/Originality: In this research, the model of the Organization of Monitoring in the Quality Management System of the Educational Process when Training of Specialists is presented in a comprehensive and complete manner.

Keywords: Educational process, educational services, monitoring, modernization of professional educational environment, quality of education.

INTRODUCTION

The problem of the quality of education concerns not only Russia but also the entire world community. Many developed countries are concerned about the current state of education and are trying to improve their quality. One of the leading trends in the modernization of education in Russia is increasing attention to the problem of improving its quality, which requires the development of conceptual approaches to finding ways to solve it. The social aspect of the solution to this problem is revealed in accordance with the quality of education to the needs of society, the country and the vital needs of people. This makes special demands to modern professional education, which should contribute to the successful socialization of young people in society, its active adaptation to the labor market, the development of social skills and abilities by young generations, which, in turn, leads to increased attention to the effective search for pedagogical solutions (Abdulatipova & Tsakhaeva, 2017; Badakhova, 2017; Borisova & Novoseltseva, 2016; Borisova et al, 2018; Gasanova et al, 2017; Daudova et al, 2016).

The modern education system has evolved from a closed to a dialectically developing, open system, which is created by society to perform socially significant functions and cannot exist independently from society. The law of the Russian Federation “On education in the Russian Federation” sets its ultimate goals, but the ways to achieve these goals are chosen independently on the basis of a comprehensive analysis of the state and social order for educational services, the state of the teaching staff to solve these problems, the ability of the administration to manage the self-development of secondary professional institutions in modern conditions, material and technical base. To date, there are various ways to improve the quality of education management in an educational institution. They include accreditation of educational institutions, the system of evaluation of the quality of education, monitoring.

In the article the authors elaborated on the system of monitoring the educational process as a tool of control, and one of the mechanisms to improve the quality of education management of the educational process (Zuleava et al, 2018; Ilkevich & Medvedkova, 2017; Sergeeva & Trubakova, 2017; Morozov et al, 2018; Tsahaeva et al, 2016; Tsahaeva et al, 2016).
RESEARCH METHODOLOGY

In pedagogical terms, the quality of education is considered from two positions: firstly, as the degree of compliance of the educational system with the established requirements and the quality of educational services provided by the educational institution; secondly, as the effectiveness of the educational process that meets the needs of social customers not only in terms of assimilation of a certain amount of knowledge by students, but also the development of their personality, cognitive and creative abilities.

The solution to the problem of improving the quality of education of students is associated with the organization of the educational process in a professional educational organization and the features of its management. In fact, we are talking about the linkage between the quality of education as a result and the quality of the educational process organized in the educational institution, through which under certain conditions this result is achieved (Gadzaov & Dzerzhinskaya, 2018).

However, the problem of quality management of secondary vocational education remains insufficiently developed.

Firstly, this is due to the fact that to date, there are different points of view in determining the essence of the concept of “quality of education”;

Secondly, the need to take into account current trends in world development, causing significant changes in the education system. The reform and restructuring of modern secondary vocational education in the light of the requirements of the Concept of modernization of the education system determines the need to bring significant changes in its management, considered as a purposeful and interrelated activities of the management and managed subsystems in connection with the relevance, social and pedagogical significance of the solution of this problem.

In recent years, more and more noticeable influence on the nature of pedagogical research on the problem of quality management of education of students has a general theory of quality management (V. N. Azarov, S. A. Voroshilov, S. D. Ilyenkova, G. Yu. Naumenko), as well as taking into account the requirements of international quality management standards series ISO9000 and the principles of Total quality management (TQM).

It should be noted that the problem of the quality of education as a scientific and theoretical problem is quite complex. To solve this problem, it is necessary to refer to the basic concepts of the study – “education” and “quality”.

The concept of education in pedagogy is interpreted very broadly and vaguely. The value, procedural, effective, systemic aspects of the functioning of social institutions of society, complementing its various contents, is put in its meaning. Education is also considered at various levels of its organization - personal, institutional, regional, state.

Traditionally, in many dictionaries, concepts, education plays the role of the formation of intelligence. For example, in his concept, E. Gusinsky gives the following definition of the concept of education: “Education - the process of familiarizing the individual to culture, the acquisition of literacy in its languages and orientation in its texts”. His other definition: “Education is the process and the result of the becoming, formation, and development of the system of concepts, ideas about the world, which makes it possible to navigate in it”.

As a process and result of training and upbringing, education is considered in other sources. For example, the pedagogical dictionary defines this concept as “the process and the result of the assimilation of systematic knowledge, abilities, skills; a necessary condition for the preparation of a person for life”; philosophical and encyclopedic dictionary interprets it as “the process and result of the assimilation of systematic knowledge, abilities, skills, a necessary condition for preparation for life and work”.

The Law of the Russian Federation “On education in the Russian Federation” represents education as “a purposeful process of education and training in the interests of man, society and the state”. And it also reveals what kind of relationship, together forming social relations in the field of education, is subject to the regulation of the Law:

1. Implementation of the right to education

Under the implementation of the right to education, the Law means the implementation of one of the socio-economic (socio-cultural) constitutional human rights guaranteed to him by article 43 of the current Constitution of Russia. From the personal right of everyone education turned into a need for the accumulation of knowledge of the whole society, as a person has ceased to be a socially isolated being, and has become part of society, interested in its education not less than the consumer of specific knowledge.

The number of educated people per thousand population depends on the level of public, economic, social development of a particular country, the productivity of the working part of the population, its intellectual potential, the place that a particular state occupies in various ratings and analytical studies;

2. Ensuring state guarantees of human rights and freedoms in the field of education, which is directly related to the public importance of the right to education

Education of the individual is the need for society as a whole, so free of charge is its main guarantee. Additional constitutional safeguards of the rights and freedoms of the individual in the field of education are getting free higher
education on a competitive basis, the pluralism of forms of education, self-education and the availability of the Federal Educational Standards. It is obvious that the state is the main guarantor in these relations, not only in the legal sense but also in the economic and organizational aspects.

Let us consider the concept of “quality”. In the philosophical dictionary, the following definition is presented: “Quality is an essential certainty of an object, by virtue of which it is this and not another object and differs from others. The quality of the object is not reduced to its individual properties. It is related to the subject as a whole, covers it completely. Therefore, the concept of quality is associated with the existence of the object.” According to S. Ozhegov, “quality is the presence of essential traits, peculiarities, features that distinguish one object or phenomenon from others; this or that peculiarity, dignity, degree of suitability”.

L. M. Moisseyev and M. M. Potashnik distinguish two signs of the quality of any product:

- Their value not from the standpoint of the manufacturer, but from the standpoint of the consumer. The concept of “quality” is characterized by at least two rows of components: “essential features, certain properties, features, a set of characteristics...”;
- “The existence of the object, the degree of suitability, the satisfaction of the established and anticipated needs, the value to the consumer...”

The problem of quality evolved over the past 40-50 years: there was a kind of metamorphosis of the problem of quality of goods and labor in the problem of quality of life, human quality, quality of culture and quality of education. Along with the ideology of development of total quality management and standards focused on the creation of certification systems, at the end of the 80-ies the ideology of human quality, quality of education and quality of life unfolds.

The quality of education is a mechanism of social regulation of the educational sphere, which determines its optimal functioning and is the result of a combination of interests and needs of various social actors.

**RESEARCH RESULTS**

In recent decades the extraordinary actualization of the problem of the quality of education is also connected with the development of the so-called “philosophy of universal quality”. Within the framework of this philosophy, there is a rethinking of the traditional concept of quality as a degree of compliance with any standard, in our case educational, that is, to what extent consumers are satisfied with the educational services provided.

In the context of this approach, the quality of education in the school of the XXI century is defined as the ratio of goal and result, expressed in a set of characteristics that reflect the level of achieved quantitative and qualitative results, the level of organization and implementation of the educational process, the conditions in which it takes place.

The **quality of education** (from a rationalistic point of view) is understood as a result of the procedural side of education and the set of competencies of graduates, which give them the ability to adapt to a changing social and economic environment, to meet determined needs. The **quality of education** is divided into the quality of the **conditions** and the quality of the result.

The first one is the ability of the institution to create within its walls educational trajectories corresponding to the inclinations and interest of students in the mandatory implementation of state educational standards.

The second one is how the results are consistent with the expectations. This definition presents two main components of quality: mandatory (standard) and variable (determined by the educational institution). The implementation of educational standards ensures the unity of the educational space of the state and guarantees the right of students to receive a fully-fledged education. Monitoring is a means of supervision in the implementation of educational standards. The second (variable) component cannot be evaluated on the basis of quantitative indicators, because it is not the result, but the direction of development of the educational institution, i.e. the personality-oriented component of the quality of education.

The necessary prerequisites for the formation of the personality-oriented component are the transition from the assessment of knowledge, abilities, and skills of students to the assessment of their competencies, as well as the assessment of the impact of the educational process on the psychosomatic state of the child.

Thus, based on the mentioned above, the quality of education can be considered as a multidimensional concept. It includes a set of essential properties of education that meets the modern requirements of pedagogical theory, practice and is able to meet the educational needs of the individual, society and the state.

**DISCUSSION**

In the last decade, the development of approaches to assessing the quality of education is carried out through the system of all-Russian, regional and international monitoring of the quality of education, as part of the experiment on the introduction of a unified state exam, as well as through scientific and practical drafting carried out both at the federal and regional levels. In the last few years, the global experience of the development of assessment tools of learning outcomes finds its reflection, including testing on the basis of modern educational measurement.
At the same time, the system of education quality assessment in Russia has not been formed into a unified conceptual and methodological understanding of the problems of education quality and approaches to its measurement yet. Quite often not tested and not standardized tools are used. The activities of the various organizations concerned with the quality of education are not sufficiently coordinated. There is no necessary scientific and methodological support for the objective and reliable collection of information, there is a lack of qualified personnel. The legal and regulatory framework of the education quality assessment system is poorly developed.

The education quality assessment involves the assessment of educational achievements of students, the quality of educational programs, the conditions of the educational process in a particular educational institution, the activities of the entire educational system of the country and its territorial subsystems.

Under the all-Russian system of education quality assessment a set of organizational and functional structures, rules and regulations is understood that provide based on a single conceptual and methodological framework assessment of educational achievements of students, the effectiveness of educational institutions and their systems, the quality of educational programs, taking into account the needs of the main consumers.

The creation of the all-Russian system of education quality assessment will contribute to ensuring a single educational space; raising awareness of consumers of educational services in decision-making related to education; ensuring objectivity and fairness in admission to educational institutions of individualization of education, the development of academic mobility and mobility of labor resources; the creation of tools of public participation in the management of social and educational environment; making informed management decisions by education authorities at various levels.

The concept is based on the following basic principles:

- The development of RSEQA, mainly as a system of external public evaluation; the priority of external evaluation of the quality of education over internal one;
- The openness of information on mechanisms, procedures, and results of evaluation within the framework of the current legislation;
- Transparency of procedures and results, normative character of formation and development of RSEQA;
- Functional unity of RSEQA at different levels with a possible variety of organizational and technical solutions;
- Application of science-based, standardized and technological assessment tools;
- Separation of information-diagnostic and expert-analytical functions (respectively, the collection and interpretation of information on the quality of education) in the framework of RSEQA;
- Prevention of monopolization of education quality assessment;
- The system-target orientation of formation of information resources of RSEQA at all levels.

The objects of quality assessment in the education system are educational programs (including those educational programs for which state educational standards are not provided).

The choice of an actual and effective educational program is interesting not only for the consumer but also for the educational organization (institution), as it is a quality program in many sectors of education that affects the competitiveness of the educational organization. Accordingly, the quality assessment and certification of educational programs is becoming a widely popular function of the RSEQA, which allows including the program among the main objects of evaluation. Educational organizations (institutions) and their systems (this includes management bodies, subordinate organizations, and services, as well as independent structures that perform certain functions on the orders of education management bodies, providing the educational process and the management process), implementing a range of educational programs of all kinds and types, including educational units of enterprises; individual educational achievements of students are the most significant object of evaluation.

CONCLUSION

The identified problems allow determining the following main directions and related tasks of modernization of the educational environment of a professional educational organization:

1. Improving the content and quality of education:
   - Strengthening the linkage between the education system and the needs of society;
   - Improving the quality of personnel training to work in variable educational programs and textbooks;
   - Development of scientific bases and scientific and practical methods of diagnostics of education, creation of conditions for ensuring the functioning of the mechanism of quality control of professional personnel training;
   - Ensuring the continuity of the content of vocational education means, forms, and methods of training and education at all levels and stages of continuing education;
- Development of material and technical base and scientific and methodological support, providing an increase in the level of information culture - stimulating the development and implementation of new information technologies in the process of teachers’ training, management and functioning of the vocational education system;

2. Resource, material and technical, legal and methodological support of the educational environment of the college.

3. Improvement of management of the continuous pedagogical education system.

4. The organization of scientific and practical conferences, seminars, meetings, contests, and advanced training courses.

5. Preparation of educational and methodical publications for teachers and students of the professional educational organization.

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REFERENCES

1. Abdulatipova E.A., Tsakhaeva A.A. (2017). The logic of designing an evaluation system for the acquisition of pro-fessional skills of future education psychologists. Modern Science Success. Vol. 2. Issue 4. P. 18 – 22.

2. Abuzjarova M.I. (2018). Tendencies, law of development and economic content of innovative entrepreneurship. Modern Economy Success. Issue. 1. P. 43-50.

3. Ashmarov I.A. (2018). Some approaches to the study of the USSR’ military economy in the soviet and russian national historiography. Historical Bulletin. Vol. 1. Issue 2. P. 19 – 31.

4. Aminova D. K., & Tsakhaeva, A. A. (2018). Effective preparation of the future psychologist as one of the elements of the security education system. International Journal of Medicine and Psychology. Vol. 1. Issue 3. P. 40 – 47.

5. Badakhova I.T. (2017). Formation of professionally significant qualities of future managers in the training process forming. Modern Scientist. Issue 7. P. 81 – 84.

6. Bolotin I.S., Mikhailov A.A., Sorokina N.D. (2017). Functional literacy of students in terms of introduction of information technologies (on the example of research among the students of MAI). Modern Scientist. Vol. 1. Issue 1. P. 160–163.

7. Borisov V.I. (2018). Influence of the food crisis for the revolution of the working mass of Russia in the years of the first world war (August 1914 - February 1917). Historical Bulletin. Vol. 1. Issue 2. P. 49 – 55.

8. Borisova I.V., Novoseltseva V.N. (2016). Structure features of intelligence of students of different types classe. Modern Science Success. Volume 3. Issue 2. P. 124 – 130.

9. Borisova M.V., Musokhranov A.Yu., Sidorova N.A. (2018). Use of fitness directions elements on physical education classes and their psychomatic impact on students of the special medical group. Modern Scientist. Issue 1. P. 6 – 9.

10. Borovikova T.V. (2017). Methodological bases of formation of the intellectual potential of territories in the conditions of innovative economy. Modern Economy Success. Issue 6. P. 46 – 49.

11. Gudzaev A.F., Dzerzhinskaya M.R. (2018). Mathematical methods of analysis of the periodic components of economic processes. Modern Economy Success. Issue 1. P. 14 – 18.

12. Gudzhieva U.B. (2018). Socialization of personality as a factor in the mental, intellectual and spiritual-moral development. International Journal of Medicine and Psychology. Vol. 1. Issue 2. P. 17 – 20.

13. Gasanova P.G., Daudova D.M, Kabieva R.A., Tsakhaeva A.A. (2017). Moral qualities of businessmen in public con-sciousness. Modern Scientist. Vol. 1. Issue 1. P. 209 – 211.

14. Gnyatyuk S.N., Pekert N.A. (2018). Education as a factor of sustainable development of agriculture. Russian Economic Bulletin. Vol. 1. Issue 3. P. 18 – 27.

15. Ilkevich T.G., Medvedkova N.I. (2017). Sports and recreational activities in the art university as a means of prima-ry prevention of occupational diseases of students –artists. Modern Science Success. Vol. 2. Issue 4. P. 29 – 33.

16. Kryuchkova K.S. (2018) Modular training of future teachers with the use of information technologies in the conditions of virtual academic mobility. Modern Humanities Success. Issue 4. P. 9 – 14.

17. Kuznetsov A.A., Ignatyeva T.A., Kuznetsov A.O. (2018). Strategy and key elements of competitiveness. Modern Economy Success. Issue 1. P. 25 – 29.

18. Morozov I.D., Sapozhnikch P.A., Pavlov S.M., Rodionova I.P. (2018). Tolerant approach in intercultural communication of students youth, Success Modern Sciences and Education, Issue 1. P. 34 – 36.

19. Narkevich, L.V., Narkevich, E.A. (2018). Financial condition analysis in the crisis management system. Russian Economic Bulletin. Vol. 1. Issue 4. P. 10 – 24.

20. Osipova M.B. (2018). Tendencies of development of educational practice of the modern educational organizations. Modern Humanities Success. Issue 1. P. 10 – 13.

21. Popov V.P. (2018). Methodological aspects of teaching economic disciplines in a multi-level system of education. Modern Humanities Success. Issue 3. P. 10 – 16.
22. Schwarzkopf N.V. (2018). Improving the use of data mining technology as a way of reducing credit risk. *Russian Economic Bulletin*. Vol. 1. Issue 1. P. 10 – 18.

23. Sergeeva M.G., Trubakova D.I. (2017). Teacher’s Reflection Formation as Factor of Effectiveness Children’s Social Intelligence Forming. *Modern Scientist*. Issue 7. P. 62 – 64.

24. Tsahaeva A.A., Aminov U.K., Aminova D.K. (2017). Driving forces of the development of adaptive behavior of personality: methodological considerations. *Modern Scientist*. Issue 8. P. 44 – 47.

25. Tsahaeva A.A., Aminova D.K., Aminov U.K. (2016). Patternsize value of the constructs of personality as a subject of scientific reflection. *Success of Modern Science and Education*. Volume 3. Issue 4. P. 16 – 20.

26. Zulaeva Ts. A., Maslova S.V., Appaeva Ya.B. (2018). Adaptation of students in the process of continuous educational activity. *Success Modern Sciences and Education*. Issue 1. P. 5 – 9.