METHODOLOGY FOR MONITORING THE QUALITY OF PROVIDED EDUCATIONAL SERVICES IN HIGHER EDUCATIONAL INSTITUTIONS

AUTHORSHIP

Elena Vasilevna Povorina
Senior Researcher, Interdisciplinary Research Laboratory, Russian State Social University, Moscow, Russia.

ORCID: https://orcid.org/0000-0003-4723-3090
E-mail: education.com.ru@gmail.com

Lidia Anatolevna Vasileva
Researcher, Russian State Social University, Moscow, Russia.

ORCID: https://orcid.org/0000-0002-4441-6740
E-mail: Lidia_V@gmail.com

Anastasia Sergeevna Ponyashova
Director of the Institute, Russian State Social University, Moscow, Russia.

ORCID: https://orcid.org/0000-0002-0732-2702
E-mail: Ponyashova@gmail.com

Daniil Vladimirovich Volkov
Researcher, Russian State Social University, Moscow, Russia.

ORCID: https://orcid.org/0000-0002-0546-4731
E-mail: Volkov_D@gmail.com

Olga Sergeevna Kulyamina
Head of Interdisciplinary Research Laboratory, Russian State Social University, Moscow, Russia.

ORCID: https://orcid.org/0000-0001-7715-5551
E-mail: Kulyamina_O@gmail.com

Received in: 2021-05-10
Approved in: 2021-06-10
DOI: https://doi.org/10.24115/52446-622020217Extra-E1174p.190-197

INTRODUCTION

The organization of the education system plays an important role in the development of society, and the assessment of the quality of the provision of educational services influences the implementation of progressive reforms in this area. The education system is based on providing citizens with high-quality educational services, formed considering the needs and capabilities of the population. Special attention is paid to the assessment of the quality of education, both in Russia and in world practice. At all educational levels, special attention was paid to solving the problem of ensuring high quality of educational services (TRETYAKOVA, 2017).

This problem has become especially acute during a pandemic when the organization of education under the influence of external factors is undergoing significant changes. In such conditions, the issue of developing methods for assessing the quality of educational services is relevant to ensure its proper level and compliance with the requirements of state standards, as well as employers and students. Quality assessment of educational services can be external and internal (TYURIKOV et al., 2018; KOOLI, 2019). The external assessment is carried out at the state level, then the internal assessment is carried out by each higher educational institution independently. The internal system for assessing the quality of education is a set of organizational structures, norms and rules, diagnostic and assessment procedures that provide, on a single basis, an assessment of the quality of the results of educational activities, the implementation of the educational process, conditions that ensure the educational process, considering the needs of the participants.

Currently, there is no single methodology for assessing the quality of educational services that could be applied by all educational institutions at the level of self-examination, as there are no uniform approaches to this issue. There are several difficulties inherent in the process of designing a procedure for assessing the quality of educational services from the point of view of consumers and making adjustments based on the results of assessments to improve the quality of these services. Therefore, the scientific novelty of the study consists in the development of a methodology and algorithm for monitoring. As well as the complex nature of the developed aggregate indicator for assessing the quality of provided educational services.

MATERIALS AND METHODS

A comprehensive analysis of monitoring the quality of provided educational services is based on the use of a large number of scientific research methods. In particular, the methods of meaningful, comparative analysis, the systemic method, and a sociological survey were used. The use of these methods made it possible to determine indicators and methods for monitoring the quality of provided educational services.
The study of the Federal state educational standards, legislative normative acts were carried out. In particular, the form “Form No. 1-Monitoring” Monitoring in the main areas of activity of the educational organization of higher education “is directly related to the research topic, which includes integrated data on the forms of statistical observation of Federal State Statistics Service- VPO-1(Information about an educational organization carrying out educational activities in educational programs of higher education - bachelor’s programs, specialty programs, master’s programs), VPO-2 (Information about the material, technical and information base, financial and economic activities of the educational organization of higher education), 2- Science (Information on the implementation of scientific research and development), 3-NK and others. The empirical basis of the study was the data of the analysis of reporting information on the activities of the educational organization and the results of sociological surveys of students, graduates, and the teaching staff of a higher educational institution, which were the main for the approbation of the developed methodology. In the course of developing and substantiating the methodology for monitoring the quality of provided educational services, the following main research objectives were solved:

- development of an algorithm for monitoring the quality of educational services;
- determination of criteria, indicators, and methods for monitoring the quality of provided educational services.

The developed methodology for monitoring the quality of provided educational services will allow identifying problems of specific educational institutions of higher education, developing recommendations for improving the quality of educational services provided in higher education.

**RESULTS**

The legislation determines the need for the functioning of the assessment system in the educational organization. Currently, there is no single methodology for assessing the quality of educational services that could be used by all educational organizations, therefore educational organizations independently determine the methodology for assessing the quality of educational services. The internal system for assessing the quality of educational services should be based on monitoring the results of their implementation. The authors proposed an algorithm for monitoring the quality of provided educational services (Figure 1).

**Figure 1. Algorithm for quality monitoring educational services.**

![Algorithm for quality monitoring educational services](image)

**Source:** Search data.
It is advisable to carry out the algorithm for monitoring the quality of educational services provided promptly, where the decision to conduct monitoring is taken by the higher educational institution independently under the development strategy. At the same time, it is necessary to timely update the data collection toolkit, which will allow determining the degree of respondents’ satisfaction with the quality of the provided educational services. In addition, can serve as an information base for calculating individual indicators when assessing the quality of educational services. When monitoring the quality of provided educational services, it is recommended to highlight the main areas of educational activities (criteria). Criteria for the quality of educational services include:

- educational programs;
- teaching staff;
- educational technologies;
- material and technical support of the educational process;
- process management.

Currently, there are certain changes in the content of educational programs, which should reflect the requirements for the implementation of programs: double diplomas, network, implemented in foreign languages. Modular curricula are being actively implemented to provide the opportunity for learning along individual trajectories. The quality of the teaching staff is influenced by many factors, including the age structure, the availability of academic degrees, participation in research activities, advanced training, and internships with leading employers and abroad. Currently, new educational technologies are being introduced, which was especially active during the pandemic, which led to a sharp transition to distance technologies. Teachers are required to be creative with the use of project-based and interactive teaching methods, the use of modern electronic educational resources in the classroom. Moreover, the teaching staff must own various educational technologies and apply them depending on the composition and interests of students to provide high-quality training (KULYAMINA et al., 2020; KISELEVA et al., 2020). High quality of the material and technical support of the educational process, including equipping classrooms with modern equipment, access to electronic library systems, information support of the educational process, digital services, a base of research equipment, are prerequisites for the provision of high-quality educational services.

The quality of management of educational processes is influenced by the work of many services of a higher educational institution, but the central place is occupied by such services as the department of organization of the educational process, the dean’s office, and the technical support service. The criteria for the quality of educational services are characterized by several private indicators that are developed by each higher education institution independently under the development strategy. The authors propose to use a comprehensive method for assessing the quality of provided educational services, which consists of the use of a consolidated (generalized) quality indicator. Since each of the listed criteria has a different significance, therefore, when calculating the aggregate indicator, an expert application of the weighting factors is necessary. Monitoring should be carried out in several stages:

- Stage 1. Collecting data based on the results of the survey (May).
- Stage 2. Collecting data to determine indicators for assessing the quality of educational services (June).
- Stage 3. Analysis of the quality of the provided educational services (July).
- Stage 4. Conclusions and recommendations for improving the quality of provided educational services (August).

The choice of periods for monitoring the quality of provided educational services is determined by the periods of sessions for students. Students of all courses of study, including graduation courses, take part in the survey of students. This determines the period of data collection based on the results of the survey. In addition, it is necessary to draw conclusions
based on the results of the past academic year and develop recommendations for improving the quality of educational services provided for the new academic year. The data collection phase involves two processes:

- questionnaire survey of respondents;
- collection of data to determine indicators for assessing the quality of educational services.

The questionnaire survey allows us to determine the degree of respondents’ satisfaction with the quality of the provided educational services, serves as an information base for calculating individual indicators for assessing the quality of educational services, and also allows you to receive information from respondents about the shortcomings in the educational and scientific infrastructure of a higher educational institution and recommendations for its improvement. Correlation analysis of satisfaction allows you to determine the factors and establish between them the presence or absence of a relationship, as well as its degree.

To conduct the questionnaire, three versions of the questionnaire are being developed for target groups of respondents: students, graduates, and faculty. Questionnaires for students and graduates are developed considering the form of study (full-time, part-time) and the level of training (bachelor’s, master’s, specialty). The assessment of the respondents’ answers depends on the form of the question. When answering the questions on assessing the degree of satisfaction with certain parameters by particular indicators, it is proposed to use a symmetric five-point scale, where 1 point - completely dissatisfied (minimum value), 2 points - not satisfied, 3 points - rather satisfied, 4 points - satisfied, 5 points - completely satisfied (maximum value). The level of respondents’ satisfaction with the quality of educational services, in this case, is defined as the sum of the answers: “rather satisfied”, “satisfied”, “completely satisfied”.

Some of the questions in the questionnaires suggest “yes” or “no” answers. Some of the questions involve open answers. The information obtained is used for a deeper analysis of the quality of educational services and to develop recommendations for its improvement. To systematize the collection of data to determine the indicators of the quality of educational services for each criterion, it is necessary to determine the sources of information, since in each educational organization they may differ under its organizational management structure, for example:

- the indicator "The share of educational programs implemented under double degree programs" - data from the centralized dean’s office;
- the indicator "The share of the teaching staff under 39 years of their total number" - data from the personnel department;
- the indicator "The level of satisfaction of the teaching staff with the work of the Centralized Dean's Office" - personal data.

Based on the survey, indicators are determined that characterize the level of satisfaction of students, graduates, and faculty with the quality of educational services as the sum of answers, rather satisfied, satisfied, and completely satisfied. The level of satisfaction of students and graduates of a higher educational institution with indicators of the quality of provided educational services are determined taking into account the form of study (full-time, part-time) and the educational level of training (bachelor’s, master’s, specialty). Based on the personal data of the structural divisions of a higher educational institution, indicators for assessing the quality of educational services are determined. Further, the calculation of indicators and criteria for the quality of educational services is carried out. The values of the indicators and criteria for the quality of the provided educational services are determined taking into account the weight coefficients assigned by an expert. Then a summary indicator of the quality of educational services is calculated.
The analysis of the quality of the provided educational services will be carried out based on the received answers of students and faculty to such open questions as, for example: “What exactly does not suit you in the educational and scientific infrastructure of a higher educational institution?” and “What could you suggest improving in the educational and scientific infrastructure of a higher educational institution and how?” Based on the results of the study of the quality of provided educational services, recommendations are developed to improve their quality (KURTSEVA, 2019).

The proposed algorithm for monitoring the quality of educational services will make it possible to carry out a comparative analysis of indicators, criteria, and a summary indicator of the quality of educational services with the data of the previous year, as well as to conduct an analysis in dynamics over a certain period.

**DISCUSSION**

Topical issues of ensuring the quality of educational services attract the attention of many specialists, including indicators of the quality of educational services (ANTONOVA et al., 2019; SEDYKH, 2019; GERRITSEN-VAN LEEUWENKAMP, 2017). Some authors propose various methods for monitoring the quality of provided educational services (NOJAVAN et al., 2021; MILYAEVA, 2019). The research raises questions of the need to develop a methodological toolkit for assessing students’ satisfaction with the quality of educational services, taking into account the presentation of educational material, its content side; provision of lectures and practical classes, the competence of the teaching staff, their ethics and communication skills, the organization of independent and research work of students, the use of active and interactive forms of education, e-learning, the level of provision of the educational and methodological complex and the material and technical support of the educational process. (MILYAEVA, 2019) There is a need for a comprehensive assessment of the compliance of the educational program with the requirements of educational standards and the level of student satisfaction is noted.

Foreign scientists note that assessing the quality of educational services using the results of student questionnaires using the SERVQUAL method as a model for assessing customer service. (NOJAVAN et al., 2021). Other authors consider individual components of monitoring the quality of provided educational services (KUZNETSOVA, 2018; BERTACCINI et al., 2021; ABBAS, 2020; LEE et al., 2019), as well as issues of organizing its implementation (SANTOS et al., 2020; KAZAKOVA, 2016; TRETYAKOVA et al., 2017). In addition, like any scientific research, monitoring in the field of education should be built under the basic scientific principles (BENKO, 2020), just as students, faculty, and staff should be ready to conduct such research (GOLUBKOV et al., 2018; PODKOVKO, 2019). In Russian practice, educational organizations often conduct an independent assessment of the quality of the provision of services by educational organizations, taking into account similar criteria (availability of information, the level of student satisfaction, the friendliness of staff and teachers, the comfort of the conditions in which educational activities are carried out).

Because of the need of educational organizations to assess and improve the quality of the provided educational services, many works by both Russian and foreign authors point to the prerequisites for the development of the author’s methodology for monitoring the quality of provided educational services, however, there is no certain systematicity and clarity in delineating the criteria, belonging of the analyzed criteria to various signs. Thus, it becomes almost impossible to conduct a comprehensive assessment of various components of the quality of educational services, and ultimately affects the overall level of its assessment. In practice, organizations often use their own set of criteria and indicators, depending on the objectives of the assessment. The methodology for monitoring the quality of educational services offered by the authors was tested in a Russian higher educational institution by conducting a questionnaire survey of students, graduates, teaching staff and evaluating the initial data of services and departments. Based on the results of testing, the criteria and the aggregate coefficient of the quality of the provided educational services were calculated.

The aggregate value of the criterion in the analyzed period was small due to the assessment of new indicators, the achievement of which was not a priority for the educational organization. The results of applying this monitoring method made it possible to identify weaknesses in the
organization of the provision of educational services, taking into account the opinions of students, graduates, faculty, and also to take into account objective data on the activities of a higher educational institution. It should be said that the use of this methodology made it possible to analyze all aspects and components inherent in the process of providing educational services, while educational activity, in turn, is one of the criteria along with the quality of the teaching staff, technical support, and management of the educational organization. This complex comprehensive nature of the assessment made it possible to develop scientifically-based directions for improving the activities of an educational organization.

It should be noted that the proposed methodology allows educational organizations to vary the set of criteria and indicators, considering the specifics of activities and types of provided educational services, various educational programs, forms, and methods of their provision, to adjust to the changing requirements of the external environment, market, government and regulatory changes.

CONCLUSION

It is obvious that at present the issues of the quality of educational services are quite acute, as is the competition between educational institutions of higher education. The pandemic has updated many educational trends and educational organizations are faced with the task of preventing a decrease in the quality of provided educational services, and in the future, constantly improving it. For this, it is necessary to assess the quality of educational services, which should be based on its monitoring. The developed methodology for monitoring the quality of provided educational services can be applied by any higher educational institution.

It should be borne in mind that the proposed criteria for the quality of provided educational services are relevant for all higher educational institutions. The indicators for each criterion of the quality of the provided educational services can be adjusted by the higher educational institution independently based on its development strategy, type, number of students, location, etc., as well as the weight of indicators and criteria for the quality of the provided educational services. Each higher educational institution may have its sources of information for determining indicators of the quality of educational services, depending on the existing organizational structure of management. The developed methodology and organization of monitoring the quality of provided educational services can be updated taking into account the regulatory documents of the Ministry of Science and Higher Education of the Russian Federation, as well as changes and requirements for the quality of services from their main consumers.

REFERENCES

ABBAS, J. HEISQUAL: A modern approach to measure service quality in higher education institutions. Studies in Educational Evaluation, 2020, 67, 100933. Available at: https://doi.org/10.1016/j.stueduc.2020.100933. Access: March 25, 2021.

ANTONOVA, I.I. & SMIRNOV, V.A. Methodological features of assessing and analyzing the quality of higher education. Quality. Innovation. Education, 2019, 2 (160), p. 3-14. March 25, 2021.

BABAKAEV, S. V. et al. New approaches to assessing consumer preferences. International Journal of Innovation, Creativity and Change, 2019, 8(10), p. 153-170. Available at: https://www.elibrary.ru/item.asp?id=41463865. Access: March 25, 2021.

BABAKAEV, S. V. et al. The influence of personal characteristics on the formation of consumer preferences for goods and services. International Journal of Management and Business Research, 2018, 8(1), p.108-119. Available at: https://www.researchgate.net/publication/329880330_The_influence_of_personal_characteristics_on_the_formation_of_consumer_preferences_for_goods_and_services/citation/download. Access: March 25, 2021.
Methodology for monitoring the quality of provided educational services in higher educational institutions

BENKO, E.V. The specifics of monitoring research in the education system. Scientific and methodological support for assessing the quality of education, 2020, 1 (9), p. 45-51.

BERTACCINI, B.; BACCI, S. & PETRUCCI, A. A graduates’ satisfaction index for the evaluation of the university overall quality. Socio-Economic Planning Sciences, 2021, 73, 100875. Available at: https://doi.org/10.1016/j.seps.2020.100875. Access: March 25, 2021.

GERRITSEN-VAN LEEUWENKAMP, K.J.; JOOSTEN-TEN BRINKE, D. & KESTER, L. Assessment quality in tertiary education: An integrative literature review. Studies in Educational Evaluation, 2017, 55, p. 94-116. Available at: https://doi.org/10.1016/j.stueduc.2017.08.001. Access: March 25, 2021.

GOLUBKOV, S.A.; ILYUKHINA, N.A. & RUBTSOVA, T.P. The readiness of a university teacher to organize intra-university monitoring of the quality of student learning. Bulletin of the Samara Scientific Center of the Russian Academy of Sciences. Social, humanitarian, biomedical sciences, 2018, 20, 5 (62), p.16-20.

KAZAKOVA, I.A. Indicators of the quality of educational services of the university. Scientific-methodical electronic journal "Concept", 2016, 11, p. 2901-2905. Available at: http://dx.doi.org/10.20853/34-5-4252. Access: March 25, 2021.

KISELEVA, N.I. & GOLUBEVA, K.A. Monitoring the assessment of the quality of educational services in the preparation of managerial personnel for the national economy as an instrument of state control. Self-management, 2020, 3 (120), p. 44-47. Access: March 25, 2021.

KOOLI, C. Governing and managing higher education institutions: The quality audit contributions. Evaluation and Program Planning, 2019, 77, 101713. Available at: https://doi.org/10.1016/j.evalprogplan.2019.101713. Access: March 25, 2021.

KULYAMINA, O.S.; BRONNIKOVA, E.M. & PATSULA, A.V. Improving the practice of admission of applicants as an urgent task of university education. Social policy and sociology, 2020, 19, 1 (134), p. 47-55.

KURTSEVA, E.G. Using the results of assessment procedures for making management decisions. Academic Bulletin. Bulletin of the St. Petersburg Academy of Postgraduate Pedagogical Education, 2019, 1 (43), p.13-16.

KUZNETSOVA, E.V. Methodology for monitoring the satisfaction of university students with the quality of educational programs. Samara University Bulletin: History, pedagogy, philology, 2018, 24, 2, p. 56-62.

LEE, M.J. et al. Students’ perceptions of hospitality education quality in the United States higher education: Domestic versus international students. Journal of Hospitality, Leisure, Sport & Tourism Education, 2019, 25, 100212. Available at: https://doi.org/10.1016/j.jhlste.2019.100212. Access: March 25, 2021.

MILYAEVA, L.G. Management of the quality of educational services in higher educational institutions: theoretical and methodological aspects. Quality management, 2019, 4, p. 316-323.

NOJAVAN, M.; HEIDARI, A. & MOHAMMADITABAR, D. A fuzzy service quality-based approach for performance evaluation of educational units. Socio-Economic Planning Sciences, 2021, 73, 100816. Available at: https://doi.org/10.1016/j.seps.2020.100816. Access: March 25, 2021.

PODKOVKO, E.N. Student monitoring of the quality of higher education as a condition for ensuring the quality of educational services. Modern higher education: an innovative aspect, 2019, 11, 1 (43), p. 45-50.
Methodology for monitoring the quality of provided educational services in higher educational institutions

Metodología de monitoreo de la calidad de los servicios educacionales prestados en instituciones de ensino superior

Resumo
O artigo reflete um estudo detalhado do tema em questão com o estudo de critérios e indicadores de avaliação da qualidade dos serviços educacionais que são relevantes, na opinião dos autores, para as instituições de ensino superior. Com base nos resultados da análise, desenvolveu-se metodologia e algoritmo para avaliação da qualidade da oferta de serviços educacionais em instituições de ensino superior. No cerne do estudo, ao considerar o conjunto de ferramentas de coleta de dados, propõe-se avaliar a qualidade dos serviços educacionais examinando três grupos-alvo de respondentes: estudantes, graduados e professores. Foi desenvolvido um algoritmo geral para a aprovação de ferramentas de monitoramento com a utilização de um coeficiente consolidado da qualidade dos serviços educacionais. A utilização da metodologia de monitoramento da qualidade dos serviços educacionais prestados pelos autores permitirá avaliar sua qualidade e desenvolver recomendações para melhorá-la.

Palavras-chave: Qualidade dos serviços educacionais. Monitorização. Ferramentas metodológicas. Critérios para avaliação. Coeficiente composto da qualidade dos serviços educacionais.

Abstract
The article reflects a detailed study of the issue under consideration with the study of criteria and indicators for assessing the quality of educational services that are relevant, in the opinion of the authors, for higher educational institutions. Based on the results of the analysis, it was developed methodology and algorithm for assessing the quality of the provision of educational services in higher educational institutions. At the heart of the study, when considering the data collection toolkit, it is proposed to assess the quality of educational services by examining three target groups of respondents: students, graduates, and faculty. A general algorithm for the approval of monitoring tools with the use of a consolidated coefficient of the quality of educational services has been developed. The use of the methodology for monitoring the quality of educational services provided by the authors will make it possible to assess their quality and develop recommendations for improving it.

Keywords: Quality of educational services. Monitoring. Methodological tools. Criteria for assessing. Composite coefficient of the quality of educational services.

Resumen
El artículo refleja un estudio detallado del tema en consideración con el estudio de criterios e indicadores para evaluar la calidad de los servicios educativos que son relevantes, al juicio de los autores, para las instituciones de educación superior. Con base en los resultados del análisis, se desarrolló metodología y algoritmo para evaluar la calidad de la prestación de servicios educativos en instituciones de educación superior. En el centro del estudio, al considerar el conjunto de herramientas de recopilación de datos, se propone evaluar la calidad de los servicios educativos examinando tres grupos objetivo de encuestados: estudiantes, graduados y profesores. Se ha desarrollado un algoritmo general para la aprobación de herramientas de seguimiento con el uso de un coeficiente consolidado de la calidad de los servicios educativos. El uso de la metodología de seguimiento de la calidad de los servicios educativos prestados por los autores permitirá evaluar su calidad y desarrollar recomendaciones para mejorarla.

Palabras-clave: Calidad de los servicios educativos. Monitorización. Herramientas metodológicas. Criterios de evaluación. Coeficiente compuesto de la calidad de los servicios educativos.