

DESIGNING ASSESSMENT TOOLS FOR QUALITY ASSURANCE IN EDUCATION

¹A.A.AKBAYEVA, ¹A.M.MUBARAKOV, ¹B.K.ABDURAIMOVA, ¹A .S.OMARBEKOVA,
¹K.Zh.SADVAKASSOVA, ²A.Z.ALIMAGAMBETOVA, ³IGOR KOCHEGAROV²

¹L.N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan

² ESIL University Nur-Sultan, Kazakhstan

³Department of Design and Production of Radio Equipment,
Penza State University, Penza, Russian Federation

E-mail: ¹aigul.akbayeva@mail.ru,

ABSTRACT

The issue of effective measurement of the learning process and students skills at the modern stage is increasingly being studied. It creates criteria by which the quality of higher education is assessed. Moreover, spreading of the newest world trends in education, which accompanied by dualization, digitalization and decentralization, etc. shows the need to expand the range of techniques and approaches to analyze the quality assurance and enhance the productivity of higher education in the provision of educational services, improving its plan and manage the process to ensure the efficiency of the training of future specialists. New approaches and tools are especially important today, given the increased demand for the training of highly qualified specialists, who are competitive in European labor markets. In this regard, this article is aimed at defining the main features of education quality assessment processes and diagnosis them; identifying the advantages of studying in an accredited university for students; describing the main sources of implementation of state accreditation processes; considering criteria and principles of using tools to assess the quality and efficiency of educational process; studying the level of education in universities. For defining methods of analysis, deduction and induction, comparison of different approaches and methods of education evaluation that will help to define the main directions and tools in monitoring research of activity quality are used. The paper presents comparative characteristics of methods for assessing the educational process quality; focus on qualitative differences in monitoring systems data; proposes an algorithm to introduce an assessment of the quality of education in higher education institutions; essences and contents of designing tools for the studied question; diagnoses university level, ratings and types of state control; justifies the objectives of the training organization; defines the directions for further scientific research on the development of using a variety of tools in the field of education quality evaluation. The materials of this article are of practical and theoretical value to students, future teachers, scientists, teachers, public administration that will be useful quality education on the basis of management decisions to improve the tools for measuring the quality of education and to improve educational programs and textbooks.

Keywords: *Assessment Of Education Quality, Expertise, Organization Of Educational Process, Monitoring, Accreditation, State Control.*

1. INTRODUCTION

Education, as one of the main factors in socio-economic development, plays a major role in creating a welfare society based on a strong state and sustainable economic growth. For improving and maintaining higher education system in

Kazakhstan is ensuring access to education quality assurance that involves the systematic review the knowledge and skills of graduates to meet the benefits of society at large. The quality of education is a social category, which is a direct reflection of the effectiveness of the educational process [1]. A three-level system of higher education, ECST

(European Credit Transfer and Accumulation System), academic credits and the flexibility of students and teachers and leaders of higher education institutions are the most important aspects of study [2].

Today, special attention is paid to the quality of education, its internal and external evaluation. There are, however, also numerous studies that address this problem [3]. In addition, as demonstrated in many empirical studies and scientific approaches, the issue of developing a system of quality assessment and studying aspects of the selection of tools becomes relevant.

The wide variety of interactions and the complexity of the educational system requires diversity in approaches to measuring the quality of the learning process. The selection of tools for assessing the quality of education determines the interaction and methods of data collection. Possible methods would be student self-report, experience sampling, teacher ratings of students, interviews, direct observation, checklists and rating scales, work sample analysis, and focused case studies [4]. The vast majority of research on quality assurance in higher education institutions has been conducted from a national perspective, with the exception of a few cross-national studies. Higher education institutions often formulate their quality assurance systems according to national standards or based on their own needs. The main focus is on teaching, learning and curriculum development that becomes relevant to create conditions that will influence the implementation of quality assurance standards [5]. Also, the partnership of the university and students in the process of quality assurance of education has attracted considerable attention in policy documents and in research on higher education. An effective dialogue is critical for engaging students in continuous improvement of higher education [6].

The purpose of this paper is to find out and analyze the existing modern tools used to measure the quality of higher education. Special attention is paid to the essential study of the continuous monitoring of the quality of education; developing innovative methods for strategic management; identification of negative aspects of state control through the accreditation system (lack of education quality assessment, lack of clear factors that are affecting the demand for graduates, the shortage of sufficient, high-skilled, qualified academic staff); description of the main sources of the accreditation processes; internal assessment of the quality in the field of education.

The relevance of the issue is the fact that the certificate of state accreditation determines the degree of compliance of the educational institution with the requirements of the legislation and allows the country to reach a qualitatively new level of development. The quality of education is an important integral characteristic of the educational process and its results, which reflects the compliance of public requirements for the learning process, knowledge and skills of the graduates. At the same time, any educational strategic decisions in the country should be based on a complex and integrated system of continuous assessment. It is especially important to monitor the quality of training and the graduate employment efficiency. The process of evaluating tools is a complex and important for many countries, as evidenced by scientific research in different historical periods.

2. MATERIALS AND METHODS

The following methods are used in the study: theoretical methods (analysis of tools for assessing the quality of educational organization activity; analysis of methodological and educational literature; deduction and induction in comparing approaches and educational assessment programs; classification of the main standards of accreditation of educational activities in universities; generalization of basic directions and tools in monitoring studies of activity quality; method of comparing approaches to theoretical understanding of monitoring the educational process and its assessment in universities; comparison and systematization of research problem; study and collection a different scientific research, empirical facts and methods of graphical display (see Table below).

The authors' research is based on the study of the assessment system and tools in the following universities of Kazakhstan: Asfendiyarov Kazakh National Medical University, Abay Kazakh National Pedagogical University.

The research conducted in three stages:

1. At the first stage, theoretical collection and analysis of existing approaches in pedagogy, programs and the education system was carried out regarding the issue of designing tools for assessing the process of study in universities, its principles and features; the works on this problem, its approaches to explanation studied; the information data, articles, books, monographs, conferences, dissertations that deeply and comprehensively

disclose standards and forms of accreditation of universities considered; type of tools and methods for researches shown; the result of theoretical interest and various interpretations of the cultural phenomenon in research studied and demonstrated; the rating of universities and their objective assessment demonstrated; logical conclusions based on research scientists made; the problem, purpose and research methods of this problem highlighted; a plan for diagnostic study made.

2. At the second stage, the analysis and design of tools for the study of the quality of education and the educational process in higher educational institutions conducted; the features and aspects of education reform were considered; the term "monitoring" and its purpose explained; the accreditation standards and criteria for higher education institutions justified; general theoretical approaches to the study of the quality of education diagnosed; tools for state control, supervision and quality assessment of educational organization were presented; the results of the analysis, which helped to identify the specifics of the problem revealed; the criteria and principles for the use of tools to assess the quality and effectiveness of the educational process justified; the findings of the research work systematized.

3. At the third stage, the material obtained during the analysis and study of scientific and theoretical works of scientists is systematized and classified; the theoretical and practical conclusions and results of the study justified; comparative analysis of studies and approaches aimed at studying the problem is presented; the main experiments of scientists who were involved in addressing the issue of quality education and its evaluation systematized; the basic modernization principles in the process of creating and organizing the educational process in universities considered; the results of the analysis and diagnosis are summarized and presented logically; data obtained and classified and presented (in the form of a Table). In addition, the authors disclosed the criteria and principles for using tools for assessing the quality and effectiveness of the educational process.

3. RESULTS AND DISCUSSION

In the context of education system reforms, the problems of pedagogical diagnostics are urgent, since it is impossible to achieve a high level of professionalism and quality of students' knowledge without observing the progress of the educational process. The problem of the quality of

education is national, regional and local for different categories of educational institutions. The process of assessing the educational institutions, obtaining knowledge and the level of educational effectiveness is related. Relevant and well-known ways of assessing the quality of the organization of the educational process are monitoring studies. The main content of monitoring is to obtain information on the state of education in order to make management decisions to create a new and high-quality level of education. This tool provides objective information about the true state of education, gives an opportunity to create different productive changes.

Education reform involves the development of the organizational structure of the education system in the country. The introduction of new legislative documents into the practice makes it necessary to develop tools to fully implement methodological recommendations for the construction of an internal system for organizing the quality of education in higher education institutions. These recommendations are based on a system of criteria, indicators and indicators that meet the modern requirements for educational activity [7].

N.Y. Voevutko, O.M. Tsekhmister highlight the main tasks of educational monitoring: establishing the common level between students knowledge and social conditions; evaluation and diagnosis of personnel support, educational, methodological and technological material equipment of the educational process; consideration of the impact of the state standards on education, which creates and regulates requirements for compulsory competencies, the total amount of teaching load, programs, methodological support, etc. [8]. Thus, the purpose of monitoring is to increase the efficiency of university activities and to ensure the use of scientific approach in the management of educational and pedagogical process.

The most important condition for improving the quality of education is a systematic approach to its assessment, which is manifested in a systematic control and analysis of objective data on the level of study and preparation of students. It is possible to monitor the implementation of individual plans, cyclograms of pedagogical and other employees, study the forms of information collection from structural divisions based on the results of reporting periods, summarize the types of work in the educational process: participation in professional development of personnel; analysis of

input and final diagnostics and control; monitoring and evaluation activities; self-analysis of results and effectiveness of student training [9].

It is important to note that for society the information about the degree of compliance of the university with the stated mission will be a priority, as well as to understand the structure of educational process. At the same time, the most valuable information for students and teachers will be confirmation that the management of educational institution follow the criteria for the quality of education. Therefore, in order to improve the quality of education at the university, it is necessary to use the principles of universal quality management [10].

In the modern world, the requirements to the content of education, forms of implementation, methodological technologies and methods of assessing educational results are constantly increasing [11]. Different types of measurement can be used to assess the learning process. The most relevant is the monitoring of the educational material presentation, which will help to present the number of objects of the training course. More complex procedures can also be applied here, namely, the method of measuring students interest. Applying these methods and algorithms, it is possible to identify the impact of different methods of presentation of educational material on the degree of interest on the part of students.

One of the most prominent factors influencing reflective analysis in higher education is accreditation. This process consists of analysing and reviewing professional, specialized features of education according to the criteria established by the state. It usually occurs every 3-10 years and has the following stages:

1) self-evaluation of the institution or program using the standards or criteria of the accrediting organization;

2) expert evaluation of an institution or program for quality assessment;

3) the announcement of the decision or the decision of the accreditation organization on the results [12].

Relevant accreditation standards and practices place much greater emphasis on measurement and results. It is important to note that there is an increased attention to the experience of students, the structure of their knowledge. More attention is also paid to the evaluation of the effectiveness of the educational institution or the

program of the educational process. Additional efforts are being made to assess student learning, and there is a growing emphasis on performance measurement in terms of outcomes.

It is worth highlighting the main standards for accreditation of higher education institutions:

- leadership (based on a study of an institution's management system). There is an examination of how leaders and leadership practices contribute to improvement, use of innovation, etc.;

- strategic planning (setting of goals and plans, engaging in these activities). The ways in which goals and plans are implemented and coordinated throughout the organization are also considered;

- programs and services (examining and considering how the quality and effectiveness of education is ensured, analyzing operational and support services);

- faculty, staff, and workplace (recruiting and reviewing faculty that contributes to the personal and professional development);

- assessment and use of information (evaluating one's efforts and effectiveness);

- outcomes and accomplishments (documenting or demonstrating the quality and effectiveness of a program, department or institution) [12].

Conducting this experiment involved the following stages of work:

- examining the literature on educational quality, university rankings, and accreditation;

- identification of tools for assessing the quality of educational activities; demonstration of graphical processing of study results;

- development of the main criteria and principles for the use of tools to assess the quality and effectiveness of the educational process.

Scientists from different countries such as Kazakhstan, Russia, Ukraine, Britain and the United States have paid much attention to study of numerous tools for analyzing the system of educational organization and its effectiveness. The authors have determined that there are such methods and tools for assessing the system of internal study of the quality and effectiveness of professional training: modular-rating assessment, student learning, computer-based testing, internal monitoring, internal audits, etc. This system is organized through the initiative of the state and the resources of universities, and is one of the mechanisms to improve the competitiveness of

educational institutions. The use of surveys, accreditation and licensing inspections, the method of independent evaluation, and ratings are important in the evaluation process. These are all methods and ways of analyzing the quality of education are conducted by state authorities. An important role is played by quality control and state statistics bodies, scientific institutes, experts, sociological companies, expert commissions, etc. Most of the above methods can be used in studies of various levels of the educational system (from the national level to the personal). The authors highlighted the main tools for assessing the quality of organizing educational activities in universities (Table 1).

Based on the results obtained, we can conclude that the education system is improving

investment in the study of the quality of the educational process and educational achievements. In Kazakhstan predominantly uses tools of state control, supervision and quality assessment of educational organization, but alternative methods (tests, ratings, public accreditation) are also beginning to be introduced. Significant methodological and organizational shortcomings are manifested in the issues of establishing an external analysis of the education system. Such practice becomes more and more popular, for it is connected with systematic complex research of a condition and prospects of development of education by separate criteria.

Table 1: Tools for assessing the quality of education organization

Tools	Description
Current statistics and separate rating data surveys	Collection and analysis of statistical reporting forms, conducting specially organised statistical observations (records, surveys, tests, sample, etc.). The main purpose is to generate data on the results of the functioning and effectiveness of higher education in order to forecast and analyse trends in its development.
State accreditation of educational programs and processes	The learning and educational programs mechanism with the requirements of educational standards
Licensing of educational activities	This method is one of the most serious and complex. During the study it is possible to determine the compliance of the university with the licensing conditions and criteria. If the educational program meets the criteria and requirements, the university gets the right to implement it. There is an official recognition of the institutions to carry out educational activities on the basis of this program.
Module-rating system of training	Regularly monitoring and track students' academic achievement, the effectiveness of teaching and learning
Monitoring	Systematic examination that diagnoses the assessment of the quality of education, its individual elements, learning in general, the opinion of participants in the pedagogical process and their satisfaction with the quality of knowledge.
Internal audit	Integrated system of quality, which allows to analyze, diagnose and predict the development of the quality of higher education. This system connects all types of assessment.
State control	State control in the sphere of education is based on assessing the compliance of educational legislation with the requirements of the country and society. It is very similar to accreditation, because the same components of the quality of educational programs are checked. The oversight can be both planned and unplanned.

Note: the Table indicates the main methods and the way of diagnosing the level and quality of educational process in universities

The principles for using the education quality assessment tool consist of 3 main components:

1. Organization of educational process (study and analysis of dynamic characteristics of educational process). The results of this research directly influence the adoption of new strategies and the use of new training to improve pedagogical performance. The main indicators of this aspect: activity of students, statistics of passing the training system programs, statistics of course completion, final evaluations, effectiveness of technical support.

2. Evaluation of training materials (identification of their current state, positive aspects and shortcomings, creating a program for their further improvement). Possible in the study is the use of tests and evaluation of training materials. Also apply reports on the results of the tests, data and final test results, etc.

3. Student satisfaction with the learning process (feedback tool for participants and teachers). If necessary, during the study of this aspect of training you can use the opinion of specialists in the learning process (methodologists, dean's office and methodical department, etc.). In order to assess the level of students' satisfaction with the quality of education it is worth highlighting such criteria and principles: assessment of the quality of training and the level of personal motivation, assessment of new formats of training [11].

Today, the constant attention of the international community to the quality of education is growing, which creates educational discussions and reforms in order to open and create the most effective combinations of processes, results that determine the quality of organized activities in educational institutions. This aspect raises many questions, complexities and uncertainties, recognizing the difficulties in defining the quality of education. The authors make an attempt to clarify the concept of educational quality, demonstrates an illustrative set of definitions and suggests ways to research the quality of educational assessment and planning. The study also emphasized the complexity and dynamic characteristic of educational quality, and its changing contextual characteristics. An urgent issue is the consideration of the problem of basic modernization principles (accessibility, quality, efficiency) in the process of creating and organizing education. M.K. Gorshkov proposed many promising ways to develop modern education

system that will allow education to become an effective means of creating and accumulating social experience [13]. An important area of innovative breakthrough is the involvement of the adult population in the educational processes.

It is interesting to study about the need for a detailed analysis of the main rating indicators of universities, which creates opportunities for their strategic development. Analysis of literary sources allows you to systematize the directions of scientific research in terms of educational development. Current development trends indicate the research of universities in the direction of assessing the quality of education in world-class global rating systems. Rating of a university strengthens its academic reputation and presents educational potential. Given this, research on rating systems is a relevant and timely direction. An example of a university ranking experiment and data that were empirically collected from publicly available sources can be cited. The positions of the top 25 research universities in the world based on global rankings were presented. The best were Massachusetts Institute of Technology, Stanford University, Harvard University, California Institute of Technology (CIT), and Cambridge University [14]. This analysis describes the strengths of the educational institutions and characterizes the key areas of their advanced specialization. The student potential was also examined, and the total number of students at these universities was analyzed and compared. The characterization of the top 25 research universities allows to determine their strengths and to systematize the key areas of deep specialization. In addition, significant differences were identified, which showed significantly different approaches to the organization of the educational and research process. The student-staff ratio and the comparison of systematized indicators demonstrate contrasting differences between the analyzed research universities and their key development priorities. Many research universities are currently reviewing their development strategies.

Existing and effective global accreditation systems as part of continuing professional development should help to improve the competence and performance of institutions. As choice and diversity are fundamental to meeting educational needs, international organizations are constantly evolving, making a deliberate, concerted effort to identify the principles that will form the basis for the creation and implementation of an effective accreditation system. The 2020 study

identified areas and criteria of substantial equivalence for recognition in higher education accreditation systems [15]. In addition, a study was conducted, which examined the regulatory and legal basis for international accreditation, a variety of European initiatives to harmonize the criteria, methods, standards and procedures for checking the quality of education. The authors diagnosed the basic definition of international accreditation, the principles of European and national quality framework for higher education institutions, identified shortcomings, summarized recommendations, provided ranking statistics and considered the prospects of development of educational program accreditation procedure [16].

In addition, many scientists focus on creating a university ranking. 1102 universities in Russia were used as the basis [17]. The authors present the results of modeling, where the data were divided into clusters: "effective" and "ineffective". The study of academic accreditation standards is clearly defined in the plans and management of higher education institutions. They provide the results of student assessment and quality of instruction. Recently, all universities and institutions have been working hard to improve their privileges, skills, and accomplishments. This aspect makes the issue of accreditation popular and promotes an integrative review. This analysis will help examine the available evidence on the impact of technology on learning and academic achievement, as well as analyze the major factors in a university's accreditation process. The authors of this study searched for relevant articles and monographs in several electronic databases with different learning methods [18]. The main contribution of this study is to demonstrate common criteria and standards for accreditation that focus on core technology instruction, improving student learning outcomes, and faculty experiences with technology. The results of this paper show the relationship between what has been done and presented before.

Research is also relevant, where it is determined by the need to create an automated system for monitoring the activities of training and the determination of rating indicators of universities is carried out in order to improve the efficiency and effectiveness of controlling and functioning universities [19]. The aim of the study was to model the processes of determining the rating indicators of universities and to form the criteria and requirements for the system of quality assessment and accreditation. The scientific novelty

of the research consisted in modeling the processes of rating processing of universities and predicting their evaluations based on mathematical models. The authors conducted a study of information systems that form the rating of education quality according to various indicators. Functional requirements for the development of an information system for the rating evaluation center of higher education institutions were formulated during the study. The following business interests were also identified: organization management evaluation and education content, teaching methods to assess the quality of knowledge and students outcome, tools for assessing the scientific effectiveness of the educational organization, the rating of the educational organization. When assessing the rating of the university, indicators for work are made, the rating of students is determined, the level of equipment of the educational organization. According to the final results the decision on the formation of quality assessment is made. The main functional requirements for universities are automation of maintaining a database of rating indicators; determining the rating of university students and university structural divisions; diagnosing the quality of university equipment; creating a rating assessment of the university by the main indicators; general report.

A rating system consists of a large number of interdependent components, which are a benchmark for comparison in assessing the quality of education. Many scholars aims at a comparative analysis of existing models. For instance, F. Faqih and T. Zayed in their study compare 9 different component rating systems followed by their critical analysis and comparison of similarities, differences and disadvantages [20]. The similarities are that the state of education quality is assessed by dividing the entire learning process into smaller components in a hierarchy, deficiencies are assessed using a grading scale, the relative importance of each component is determined. The main differences between the different assessment systems are in the goals and scope of the rating, the different methodologies, tools, and research methods used for the final assessment of educational quality. The processes for rating components of higher education institutions were very subjective, for most rating systems were based on visual observation and interpretation by the testing staff. The existing methods and tools of verification and assessment methodology could be improved to reduce the time, material resources used and subjectivity.

Based on the results of analysis of international experience of students' participation in assessing the quality of educational activities of higher education institutions, the possibility of including students in expert groups to monitor the effectiveness of learning was justified. Many researchers have considered and studied questionnaire tools about the mechanisms for monitoring the quality of education [21]. Also, a comparative analysis of students to assess the level of educational programs was conducted; aspects of organizing and conducting the survey of students were determined; the prospects of using the tool "online survey" in assessing the level of professional performance of universities were studied; the requirements for the software product were analyzed; the advantages and disadvantages of the tool were diagnosed. In Ukraine, traditionally conducted a survey of students in the SERU ("Student experience in the research university"), which takes place using modern digital technology and in real time (the so-called online survey). The use of modern IT content tools helps to expand the range of respondents and minimize the pressure on the part of the interviewer on the content of the answer. The main disadvantages of the online survey are: 1) not all students participate or lack of involvement; 2) the results obtained through online survey cannot be considered representative; 3) anyone can take part in the survey; 4) the threat of a lack of respondents (unwillingness of students to act as experts on the quality of higher education); 5) ignoring and loss of valuable information (use of closed questions, answers to which are selected by the respondent only within certain options).

The German experience in quality assurance of education is becoming important, which includes internal and external evaluation procedures with the involvement of international representatives and student organizations [22]. Along with expertise and accreditation, other methods of quality assurance are also used. The most relevant is quality management. It was diagnosed that the universities accredited 86 bachelor's degree programs out of 764 available (11.3% of the total number) and 116 master's degree programs out of 802 available. In professional higher education institutions the situation is the following: 93 out of 482 (19.3%) bachelor's and 117 out of 493 master's degree programs. The Accreditation Council has the following duties: 1) to introduce a quality standard; 2) to accredit universities with authority and periodically re-accredit them; 3) to monitor and check the fulfillment of tasks; 4) to determine the

requirements and criteria for the accreditation procedure; 5) to promote "healthy" competition; 6) to represent higher education in quality assurance. It is the Accreditation Council that develops the standards and criteria for this procedure. The most common form of quality assessment remains the student survey, which is conducted regularly within faculties. In Germany most faculties (54.2%) conduct them every semester, in other cases (45.8%) once a year or less. These questionnaires influence positive changes in the organization of the educational process (introduction of new disciplines). It is also worth highlighting the method of examination, which is a complex procedure of analysis and evaluation and helps to explore the strengths and weaknesses of the surveyed university or program. It is this tool that facilitates the development of systematic strategies for quality assurance and improvement. The peculiarity of examination is the priority of control over the learning process. In the last few years there has been an expansion of this process and a comprehensive review of universities and their research activities. Germany has a three-tiered system of examination: 1) self-study; 2) external evaluation and assessment; and 3) implementation of new assignments and goals based on the results of verification. For all stages a specific dialogical character is applied, which is based on discussions about the development of higher education.

As a result, the quality assurance process involves analysis, control and optimization of all components of the educational process (qualification of educational personnel, organization of training, setting goals, curricula and programs, library collections, availability of new technical equipment, preparedness of young people and their motivation). The complexity of the problem of quality of education lies in determining the degree of participation in this issue of public authorities, which expresses the ideals and requirements of society. It is unlikely that there will ever be a full consensus on the study of the specifics of the quality of education and the tools for its research, but such an agreement is not important for initiating, changing and improving methods of diagnosis. The main contribution of this study is to demonstrate common criteria and standards for accreditation that focus on core technology instruction, improving student learning outcomes, and faculty experiences with technology. Descriptors are operational indicators, describe the levels of achievement for each criterion and are evaluated by a certain number of points: the higher the achievement, the higher the score for this

criterion. The results of this paper show the relationship between what has been done and presented before.

4. CONCLUSION

The role of education in modern society is excessively high, because it is the foundation of society development. Based on the processes of globalization and internationalization of the educational process, there is a growing interest in assessing the quality of education, because there are constant changes in the market environment and increasing requirements focus attention on the professional competence of the specialists.

This paper points out that the studies of the authors have provided an in-depth study and description of the tools for assessing the quality of higher education, have provided a set of indicators of learning and quality of teaching in universities. At the same time, it should be noted that today the issue of improving the procedures for assessing educational institutions and students' achievements is becoming very relevant. Important aspects of assessing the quality of education are the inclusion of contextual data in the set of information; development of data aggregation tools; introduction of record keeping and monitoring techniques; introduction of standards for reporting results.

The results of the research, according to the authors, can be of practical and theoretical value for students, teachers, scientists and public administrators, which will provide quality education based on management decisions to improve the tools for measuring the quality of education and to improve curricula and textbooks. The study, also, may be relevant to scholars and educators who work on optimizing the process of accreditation in universities and diagnose rating results.

Materials used in this paper can be of practical and theoretical value for students, teachers, scientists and public administrators, which will provide quality education based on management decisions to improve the tools for measuring the quality of education and to improve curricula and textbooks. The study, also, may be relevant to scholars and educators who work on optimizing the process of accreditation in universities and diagnose rating results.

The research process has raised new questions and challenges that need to be addressed.

Directions for further research on the development of the use of various tools for assessing the quality of educational activities and the quality of higher education identified. The current approach is more flexible than the previous purely quantitative approach. But at the same time, accreditation to a much greater extent becomes a subjective process, depending on the quality of the composition of the visiting commission, which bears full responsibility for the final decision.

The conclusions can be supplemented by further scientific research. The most promising areas in the organization of scientific research are the development of the content of the questionnaire for assessing the quality of higher education by students, the justification for choosing a platform and tools for research; carrying out an analysis followed by recommendations to improve the quality of higher education. But it is also necessary to take into account that when designing tools, it is necessary to include the development of descriptors that will make it possible to realistically assess the current situation and make the best decision.

The new approaches and tools are especially important today, given the increased demand for workers in European labor markets. This research is aimed at determining the main features of the process of assessing and diagnosing the quality of education; identifying the benefits of studying at an accredited university for students; description of the main sources for the implementation of state accreditation processes; consideration of criteria, descriptors and principles for using tools for assessing the quality and effectiveness of the educational process; studying the level of education in universities.

REFERENCES:

- [1] Malikov, K. (2019). Mechanisms for assessing the quality of education in Kazakhstan. *KazNU Bulletin. Pedagogical Series*, 60(3), pp. 52-60.
- [2] Zhusipova, A. (2019). Bolashak process and knowledge of Kazakhstan's higher education system. *QAZAQ Gazetteri*. <http://kazgazeta.kz/?p=2934>
- [3] Tareva, E.G. (2021). The classifier of linguodidactic competencies is a tool for assessing the quality of training of a teacher of foreign languages. *Intercultural Multilingual Education as a Factor of Social Transformations: The Formation and Development of a Scientific School*, 2021, pp.45-54.

- [4] Mandernach, B.J. (2015). Assessment of student engagement in higher education: A synthesis of literature and assessment tools. *International Journal of Learning, Teaching and Educational Research*, 12(2), pp.1-14.
- [5] Alzafari, K., Ursin, J. (2019). Implementation of quality assurance standards in European higher education: does context matter? *Quality in Higher Education*, 25(1), pp.58-75.
- [6] Isaeva, R., Eisenschmidt, E., Vanari, K., Kumpas-Lenk, K. (2020). Students' views on dialogue: improving student engagement in the quality assurance process. *Quality in Higher Education*, 26(1), pp.80-97.
- [7] Grigorash, V.V. (2020). Evaluation of the pedagogical efficiency of the readers to the foundation of the mediocre education as an element of the internal system and securing the quality of education. *Adaptive Management: Theory and Practice*, 5(15), pp.18-19.
- [8] Voevutko, N.Y., Tsekhmister, O.M. (2020). Psychological and pedagogical conditions for the organization of monitoring of educational achievements in general secondary education. *Educational Management: Theory and Practice*, 8, pp.13-20.
- [9] Ilyasova, O.A., Saygushkina, S.V., Polikarpova, N.V. (2021). A systematic approach to assessing the quality of education in an institution of additional professional education. *Scientific and Methodological Support for Assessing the Quality of Education*, 1(12), pp.49-55.
- [10] Zhichkin, A.M. (2014). Method of application of quality control tools in institutions of higher professional education. *Higher Education Today*, 1, pp.19-25.
- [11] Ponachugin, A.V. (2020). Monitoring the quality of education as an important factor in the preparation of bachelors in the field of applied informatics. *Bulletin of Minin University*, 8(1), pp.4-5.
- [12] Brent, D.R. (2007). Higher education assessment: Linking accreditation standards and the malcolm baldrige criteria. *New Directions for Higher Education*, 137, pp.59-83.
- [13] Gorshkov, M.K. (2019). *Continuing education in the modern context*. Moscow: Yurayt.
- [14] Sitnicki, M.W. (2018). Determining the priorities of the development of eu research universities based on the analysis of rating indicators of world-class universities. *Baltic Journal of European Studie*, 8, pp.76-100.
- [15] Marushko, R.V. (2020). Standards of substantive equivalence between accreditation systems for continuous professional development. *Modern Pediatrics*, 4(108), pp.7-13.
- [16] Motova, G.N., Korotkov, P.A., Matveeva, O.A. (2020). International accreditation of Russian universities. Moscow: Publishing house "Panorama".
- [17] Romashkova, O.N., Gaidamaka, Y.V., Ponomareva, A.L., Vasilyuk, I.P. (2018). Application of information technology for the analysis of the rating of university. *Selected Papers of the VIII Conference "Information and Telecommunication Technologies and Mathematical Modeling of High-Tech Systems"*, pp.46-53.
- [18] Ragad, M.T., Muamer, N.M., Ruzaini bin Abdullah, A., Romli, A. (2018). Review on the effect of student learning outcome and teaching technology in Omani's higher education institution's academic accreditation process. *Proceedings of the 2018 7th International Conference on Software and Computer Applications (ICSCA 2018)*, pp. 243-247.
- [19] Romashkova, O.N., Ponomareva, L.A., Vasilyuk, I.P. (2019). The process of automating the rating of Russian universities. *Selected Papers of the IX Conference "Information and Telecommunication Technologies and Mathematical Modeling of High-Tech Systems"*, pp.109-117.
- [20] Faqih, F., Zayed, T. (2021). A comparative review of building component rating systems. *Journal of Building Engineering*, 33, pp.12-13.
- [21] Moroz, V.M., Sadkovy, V.P., Babayev, V.M., Moroz, S.A. (2018). Online survey of students in the quality assurance system of higher education. Information technologies and teaching aids: electron. *Science Professional Viewer*, 68(6), pp.235-250.
- [22] Sheremet, L.A. (2011). The quality assessment system of higher education in Germany. *Bulletin of Ivan Franko Zhytomyr State University*, 57, pp. 33-38.
- [23] Akhmetova A.Zh., La L.L., Murzin F.A. Rescaled Range Analysis for the Social Networks. // *ICEMIS '19: Proceedings of the 5th International Conference on Engineering and MIS2019*, 06-08 June, Article No.: 24, pp. 1-4. <https://doi.org/10.1145/3330431.3330456>
- [24] Akhmetova A.Zh., Batura T.V., La L.L., Murzin F.A. «Data Analysis Based on Latane Theory and Analysis of Events Changing in



Social Networks» // Journal of Theoretical and Applied Information Technology, Vol.97. No 16, 31st August 2019. ISSN: 1992-8645, E-ISSN: 1817-3195

- [25] Kanturyeva M.A., Tussupov J.A., Murzin F.A., Uspanova A.I., Abisheva A.A. Application of cellular automata for modeling and review of methods of movement of a group of people. » // Journal of Theoretical and Applied Information Technology, Vol.97. No 15, 15st August 2019., E-ISSN: 1817-3195. 4000-4010