S.M. Jumasheva

Narxoz University, Almaty, Kazakhstan
(E-mail: sulushash.jumasheva@narxoz.kz)

Modern models of managing quality of educational services in universities

The article considers the three main groups of quality models, which form the basis of the quality assurance system in higher educational institutions. The following models are considered in more details: model of the European Foundation for Quality Management (EFQM); model operating on the principles of the Total Quality Management (TQM), meeting the requirements of ISO 9000; ENQA model (European Association for Quality Assurance in Higher Education), aligned with the «The Standards and Guidelines for Quality Assurance in the European Higher Education Area» (ESG). Measures taken to ensure the quality of higher education in universities are considered. Positive trends in the sphere of ensuring quality of education were noted. Also, the main problems in the creation and functioning of quality management systems in universities were revealed. One of the solutions to these problems is the use of modern information technologies. It is noted that some universities continue to use outdated principles of quality management of higher education. Not all universities are guided by the mission, vision, strategic plan in the construction of quality education systems. In most of the universities only knowledge of students is assessed, assessment of skills and competencies is not carried out. Upon analysis, recommendations for the effective functioning of quality assurance systems in higher education institutions were made.

Keywords: models of management of quality of educational services, quality management system, total quality management, internal evaluation of the quality of educational services.

The introduction of quality management systems in the education system is a principal task in the field of building a university management system. The main reasons driving universities to introduce and improve quality systems are meeting the requirements of all the stakeholders (students, employers and others), as well as increasing the efficiency of the organization. The experience of leading universities in the world shows that the success of an educational institution is determined by the chosen strategy in the field of quality.

On international level, there are several most common models of quality management systems in universities, including models of national and regional quality awards; evaluation method; model of the European Foundation for Quality Management (EFQM); a model operating on the principles of the Total Quality Management (TQM), meeting the requirements of ISO 9000 and a number of others. At the same time, the quality management system is understood as the totality of the organizational structure, methods, processes and resources needed to implement the overall quality management [1, 2].

Currently, three main groups of quality models that form the basis of the quality assurance system in the university [3] can be distinguished in the international educational sphere. The first group is based on the concept of TQM and ISO model 9000:2000. TQM is a comprehensive philosophy that is based on the introduction of quality principles into all organizational processes. Five fundamental principles of TQM: a clear focus on customer needs; continuous improvement; ensuring the quality of internal processes; orientation to the process; prevention of mistakes instead of control. Operational principles of this philosophy are: management and commitment of leaders of the organization; employee involvement; teamwork; systematic solution of problems; focus on facts and data.

The TQM concept presupposes that the university has a clearly articulated mission and strategic goals that ensure its implementation. The system of strategic goals is developed taking into account a comprehensive study of the university's resource capabilities, its vision, the state and trends in its external environment. Continuous improvement of the activity of the university is the main function of leadership in the transformation of the activities of educational institutions to TQM.

The practice of various organizations shows that the use of TQM methodology provides the following advantages: improving the quality of products or services; increase in labor productivity; increase in the level of customers' satisfaction.

The ISO 9001 series of standards are developed on the basis of the provision that «certain minimum characteristics of a quality management system should be standardized with a focus on the process» [3].

The management model based on the requirements of ISO 9000: 2000international quality standards is based on eight fundamental principles of quality management including the process approach and involves the assignment of persons interested in the activities of the university, identifying their requirements for the quality of products and services and creating a system for its continuous improvement.

In this model, the main management tool is a documented quality management system. A «Quality Guide» and guidelines for managing all system processes are being developed. For example, «Documentation Management», «Personnel Management», «Classroom Fund Management», «Logistics Management», «Library Information Management», «Managing theStudent Recruitment Process», etc.

The management model based on the requirements of ISO 9000: 2000 international quality standards is shown in Figure.
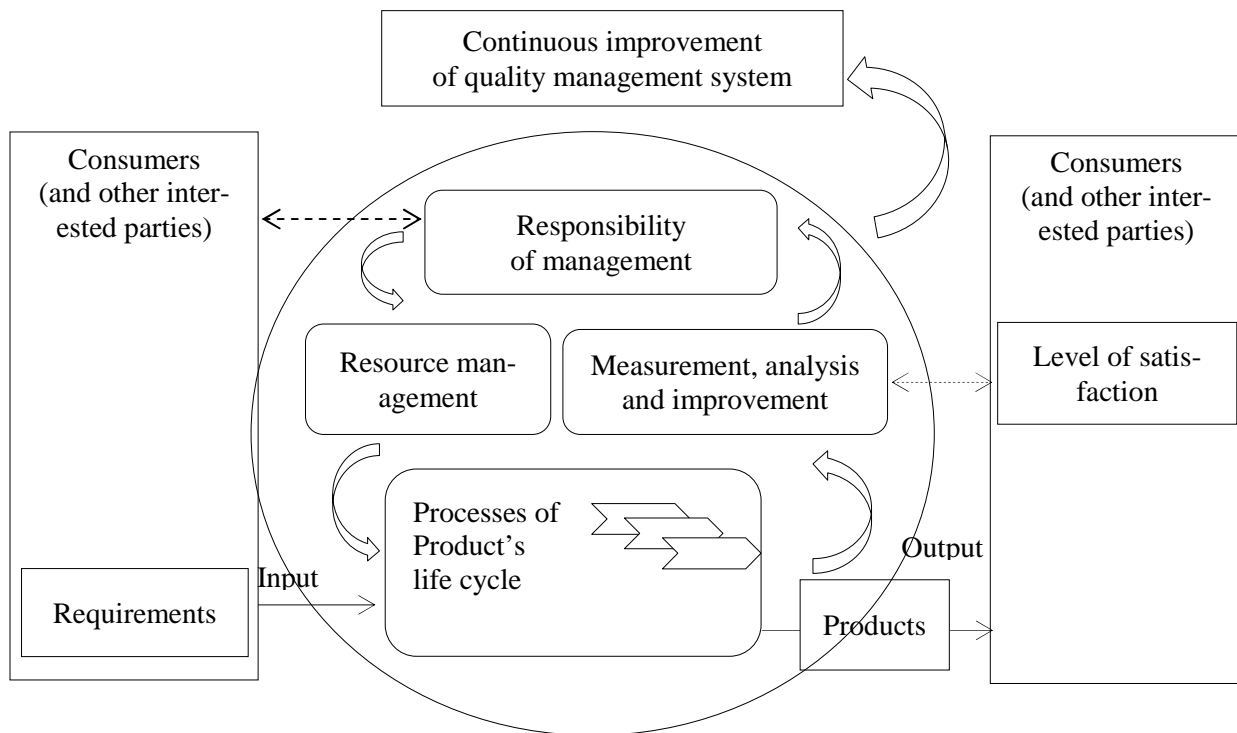

Figure. Model of the quality management system based on the process approach [4]

The evaluation method is based on comprehensive survey of the university's functional areas, self-assessment of activities and the adoption of certain measures based on their results. This model of quality management assumes systematic self-assessment, identification of strengths and weaknesses on the basis of SWOT- analysis and development of measures to solve existing problems or improve the situation. The self-assessment model is widely used during accreditation in universities of the United States, Canada, western European countries. The parameters and characteristics of the evaluation systems used can vary considerably depending on national and local characteristics.

In the practice of local universities, traditional model of self-certification of higher educational institution has become more widespread. The model for assessing the quality of activity of higher educational institution in the form of self-assessment is, as a rule, the stage of evaluation preceding the state certification of higher educational institution. Self-certification is a form of control designed to ensure compliance with governmental quality standards.

The second group is the systems characterized by the criteria of quality improvement model. This is the model of the European Foundation for Quality Management (EFQM); ENQA model (European Association for Quality Assurance in Higher Education), aligned with the «The Standards and Guidelines for Quality Assurance in the European Higher Education Area» (ESG); as well as prizes in the field of quality.

The business excellence model of the European Foundation for Quality Management (EFQM) is a framework for assessing progress in advancing business excellence based on use of nine criteria. The «Opportunity» group includes the following criteria: leadership; policy and strategy; people; partnerships and resources; processes. «Results» group includes: results for consumers; results for employees; results for society; key performance results [5].

The EFQM model is the practice of managing an organization, including focus on results, attention to the consumer, leadership and persistence of goals, management based on processes and facts, staff involvement, continuous improvement and innovation, mutually beneficial partnerships, corporate social responsi-

bility. The administration of higher educational institutions should focus their attention on the extent to which students achieve expected learning outcomes. Processes should be focused on increasing the learning outcomes of students, i.e. the development of the structure and content of curriculum, preparation of educational materials, provision of programs by faculty, selection of methods and technologies for teaching, provision of resources for curriculumshould be aimed primarily at achievement of expected results by students. The application of the EFQM model has become widespread in higher education in many countries (including Europe, Russia and Kazakhstan).

It should be noted that the EFQM, ISO 9001 and business process reengineering (BPR) models are not mutually exclusive; in essence, they are variants of the TQM methodology. The models use typical functions in terms of continuous improvement of organizational processes, focus on the role of leaders in the organization. Quality assurance, customer focus and emphasis on processes are important elements of four models.

The third group includes models of quality improvement, which have a narrower focus in comparison with the second group. This is a balanced system of indicators, the Six Sigma methodology, the engineering system and other models. The introduction of these models in the work of the university seems more labor-intensive and requires special training at all levels of the educational institution.

Business process reengineering (BPR) refers to the radical modernization of business processes in order to improve productivity measures, such as costs, quality, service, speed of service. These changes relate to the company's strategy, processes, technology, organization and culture.

The variety of quality management models of higher education is expanding within each model due to the specifics of content of indicators used. This specificity is determined by the composition and content of the quality control and evaluation procedures (self-assessment, audit, various forms of monitoring and current evaluation which are conducted at certain intervals). There is a great variety in the approaches to the choice of evaluation methods.

The most commonly used method in the practice of quality assessment is the method of quantitative assessment of quality factors for compliance with their established quality standards using natural units of measurement.

There is a weighting and summation method (in points or in percentages). As a rule, this method of evaluation is used in the framework of premium quality models and in determining the rating of universities: foreign and domestic [6].

Within the chosen structure of management model, the quality of its content is significantly influenced by the list of parameters and evaluation criteria that are very diverse. The variety in the indicators and evaluation criteria is explained by different levels of development of universities and the introduction of strategic management systems, content of their educational activities, goals and objectives and many other factors of the internal environment of higher educational institutions.

Criteria can be focused on assessment at the level of statement of facts, as well as on the assessment of quality in the dynamics of its development. In universities, a system of quantitative and qualitative indicators is being developed.

Determination of numerical values of indicators of qualitylevel is carried out by methods of qualimetry. The use of qualimetric approach in assessing the quality of educational process is that the economic indicators of educational process are expressed in value units, and the qualimetric indicators characterizing the quality of educational process are usually expressed in dimensionless form [7].

According to the researchers of the Agency for Quality Assurance in Education and Career Development (Russia), qualitative indicators should be used in the procedures for external and internal evaluation of learning outcomes, as they provide an opportunity to evaluate the expected learning outcomes expressed in competencies; the effectiveness of teaching methods and technologies; quality of teaching; educational resources, etc. Internal quality assessment at the institutional and (or) program level should use qualitative indicators and those quantitative indicators that allow for a qualitative interpretation. Higher education institutions should be compared in terms of the quality of educational programs of the same name or in the dynamics of education quality indicators [8].

According to research conducted by the author among Kazakhstani universities (Nazarbayev University, KIMEP University, Narxoz University), the Standards and Guidelines for Quality Assurance (ESG-2015) are the main guidelines for ensuring quality of education. The heart of all quality assurance activities are the twin purposes of accountability and enhancement. These principles support the development of a quality culture that is embraced by all: from the students and academic staff to the institutional leadership and management. The concept «quality assurance» describes all activities within the continuous improvement cycle.

During interviews, most of respondents agreed that «quality» is a complex concept. For respondents it is primarily quality of teaching. This means quality of academic courses offered to students; continuous improvement of learning experience for students. Quality is a «knowledge offered to students». Currently Kazakhstani universities make the growing emphasis on students' learning outcomes. The content of training materials, syllabuses and examination papers are high important.

Respondents mention that one of the aspects of quality of education is the training of qualified alumni who possess the analytical skills, creativity, problem solving, communication and other skills that can be useful on the labor market. Quality of educational programs should meet the requirements of employers. Respondents highlight the importance of scientific research for increasing quality of education.

Below is a comment from one respondent: «It is vital to contextualize quality standards carefully. Indeed, I believe the notion of quality is subjective and is different for each educational organization. To create a valid, effective quality framework, it is crucial to involve all stakeholders to establish a culture where everyone, including students, shares the same understanding of the concept. In my opinion, a culture of quality is based on two main pillars: alignment with a set of standards and more importantly, an exceptional learning experience, as evidenced by positive feedback from students, employers, society».

Kazakhstani universities implement different models of quality management. The most popular is Total Quality Management framework. For example, the quality framework in two universities studied is based on the UK Quality Assurance Code and ESG - 2015.

As it was mentioned by one respondent, the standards are contextualized to realities of certain university. «Some features of these models are also present in the University's quality assurance and enhancement frameworks, such as in the annual program monitoring process and the annual quality enhancement plans (Total Quality Management)». Kazakhstani universities use a continuous improvement approach as well as PDCA (Plan-Do-Check-Act) cycle.

As for strategic documents on ensuring quality of education, each university has elaborated a strategy which is intended for three or five years' period. For example, the main focus of KIMEP Strategy is a student-orientedness. The main operational processes are reflected in Student Code, Faculty Code of Practice and other documents.

The Strategy in Narxoz focuses on introduction of innovations in learning processes and research strengthening; introduction of IT systems in all educational processes, creation of internal quality assurance with focus on students and faculty members; internationalization and strong connections with businesses.

Nazarbayev University established a quality enhancement system in 2014, which is supported by the Academic Quality Framework approved by the Academic Council. It is associated with the university's strategic goal of «Academic excellence». There are special regulations for annual program monitoring, student engagement, program approval, external and periodic reviews.

The universities surveyed have established Quality Assurance Departments. Respondents mentioned that all university departments are the users of information from Quality Assurance Departments. In order to monitor the satisfaction of stakeholders with quality of education, universities collaborate with employers, students' parents, alumni, etc. For example, the Institutional Research (IR) team in Nazarbayev University analyzes key issues for the purpose of thorough review and action. The IR shares all of its findings with relevant stakeholders. Institutional research offers the university's administration (the provost, vice provosts, and vice presidents) data that may be helpful in making certain strategic decisions.

In terms of quality management, the respondents mention that quality in some Kazakhstani universities has become a synonym for control, compliance and accountability, which leads to increased bureaucracy. Instead, the universities should focus on international approaches in quality assurance rather than using Soviet time models. Interviewees stated that quality improvement processes should take place in an environment free from the fear of punitive outcomes. They mention that there must be a development of university-wide quality culture.

Next problem is a lack of trust in people: «Academics are not involved extensively in the policy-making and program-development process and therefore feel disengaged and opposed to any changes». Faculty members still consider quality assurance departments as a controlling body.

Another area for improvement mentioned by universities is enhancing communication between the top management and schools. The lack of interaction affects stakeholders' involvement in discussions to increase institutional efficiency and decreases transparency.

As result of study, the number of recommendations could be highlighted. On the national level interviewees recommend to grant an academic freedom to universities in terms of development of educational

programs. Important task in ensuring quality should be assigned to national and international accreditation agencies and universities themselves.

One of the principle recommendations given by interviewees was that the quality assurance managers should trained to use internationally-recognized approaches of quality management. There is a need to establish a professional organization uniting quality assurance managers of Kazakhstani universities. It should be in form of platform where university administrators, quality assurance managers could exchange ideas, share materials, discuss and solve problems in assuring quality of education.

Since faculty members are considered as main quality providers, they must be enabled to initiate and lead changes in the learning process. Faculty members should be motivated for the implementing quality assurance practices.

In general, on institutional level it was stated that international benchmarks and policies of quality management should be carefully analyzed and contextualized to Kazakhstani universities.

Analysis of the experience of universities allows us to single out the following positive trends in the sphere of ensuring the quality of education:

− Transferring the focus from external quality control procedures to internal self-assessment of activities by universities.

− Participation of universities in various national and international rankings, quality contests.

− In many universities there are specialized structural units for management of quality of education.

− Development of strategic partnerships between universities and employers.

In recent years, there has been a trendy to build quality management systems of education on basic principles of quality managementwithout binding to any particular model.

According to Sirotkin, in universities there are problems of effectiveness of models and quality management systems. The current management systems in higher education do not fully affect the quality of education. The following shortcomings are revealed:

− The load of quality management systems (a large number of documents making up the system; it is difficult to find any connection between them; to track the fulfillment of tasks).

− Lack of qualified quality managers at the top and middle levels of university management.

− Opacity of systems, i.e. It is not clear which elements of the university's activity constitute the system, what parameters of activity are assessed and how they are evaluated.

− The human factor (non-fulfillment, non-perception, non-professionalism).

The shortcomings above can be eliminated by applying modern technologies and scientific methods. Leading world universities have long been using advanced information technology and modern approach to information systems. The creation of automated system for managing the quality of education increases both the effectiveness of the system itself and the quality of the educational services provided [9].

Analysis of internal quality assurance systems in universities shows that some of them continue to use outdated management principles, focusing on solving the problems that have arisen, and not on eliminating the shortcomings of the educational activities that generate them. It should be noted that not all universities in the construction of educational quality systems are guided by the mission, vision, strategic plan and specify them at the level of programs, faculties and departments. In most of the universities, only knowledge is assessed, no evaluation of skills and competencies is carried out.

Thus, quality management systems should be flexible, allowing to evaluate the quality of the activity not only of the whole university, but also of faculties, specialties, and separate educational programs.

We distinguish the following factors necessary for the effective functioning of quality assurance systems in higher educational institutions:

− Focus on improving the quality of education. The priority is to ensure quality in terms of results of educational activities, the needs of students, as well as continuous quality improvement.

− Focus on key educational processes: teaching, assessing students' knowledge.

− Participation of teaching staff in the development of quality policy and implementation of quality assurance processes. It is necessary to create opportunities for professional growth of teaching staff, increase motivation and level of satisfaction of academic staff.

− Participation of university management in the creation and development of quality assurance systems.

− Participation of students in the issues of ensuring the quality of education. To this end, universities should create an appropriate environment that encourages students to actively participate.

− Availability of resources (human, material, financial and other).

– Development of policy in the field of quality, creation of appropriate structures for ensuring the quality of education.

– The responsibility of universities to the individual, society and the state; transparency of universities.

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С.М. Джумашева

Жоо-да білім беру қызметтерінің сапасын басқарудың заманауи үлгілері

Мақалада жоғарғы оқу орындарында сапаны қамтамасыз ету жүйесінің негізін құрайтын сапа модельдердің үш негізгі тобы қарастырылған. Төмендегі үлгілер егжей-тегжейлі зерттелді: еуропалық сапа менеджменті қорының үлгісі (EFQM); ИСО–9000 талаптарын қанағаттандыратын Жалпы сапа менеджменті (TQM) қағидаларында жұмыс істейтін модель; Европалық кеңістіктегі жоғары білім сапасын қамтамасыз ету бойынша стандарттар мен ұсынымдарға сәйкес келетін ENQA үлгісі (Еуропалық кеңістіктегі жоғары білім сапасын қамтамасыз ету бойынша Еуропалық қауымдастық). Жоғарғы оқу орындарында жоғары білім беру сапасын қамтамасыз ету үшін қабылданған шаралар талқыланды. Білім беру сапасын қамтамасыз ету саласында оң үрдістер байқалды. Сондай-ақ жоғары оқу орындарында сапа менеджменті жүйесін құру мен жұмыс істеудегі негізгі проблемалар анықталды. Осы проблемалардың шешімдерінің бірі қазіргі ақпараттық технологияларды пайдалану болып табылады. Кейбір жоо-лар сапалы білім беру жүйесін құрудағы миссияны, көзқарасты, стратегиялық жоспарды басшылыққа алмайды. Көптеген университеттерде тек қана білім бағаланып, дағдылар мен құзыреттерге бағалау жүргізілмеді. Талдаудан кейін жоғарғы оқу орындарында сапа кепілдігі жүйесінің тиімді жұмыс істеуі үшін ұсыныстар берілді.

Кілт сөздер: білім беру қызметтерінің сапасын басқару модельдері, сапа менеджменті жүйесі, әмбебап сапа менеджменті, білім беру қызметтерінің сапасын ішкі бағалау.

С.М. Джумашева

Современные модели управления качеством образовательных услуг в вузах

В статье рассматриваются три основные группы моделей качества, составляющие основу системы обеспечения качества образования в вузах: модель Европейского фонда по менеджменту качества (EFQM); модель, работающая по принципам Всеобщего менеджмента качества (TQM), соответствующая требованиям ISO 9000; модель ENQA (Европейская ассоциация гарантии качества высшего образования), согласованная со «Стандартами и рекомендациями для гарантии качества высшего образования в Европейском пространстве» (ESG). Рассмотрены предпринимаемые в вузах меры по обеспечению качества высшего образования. Отмечены положительные тенденции в сфере обеспече-

ния качества образования. Также выявлены основные проблемы при создании и функционировании систем менеджмента качества в вузах. Одним из решений этих проблем является применение современных информационных технологий. Отмечено, что некоторые вузы продолжают использовать устаревшие принципы управления качеством высшего образования. Не все вузы при построении систем качества образования ориентируются на миссию, видение, стратегический план. В большей части вузов оцениваются только знания, оценивание умений и компетенций не проводится. После проведенного анализа выработаны рекомендации для эффективного функционирования систем обеспечения качества в высших учебных заведениях.

Ключевые слова: модели управления качеством образовательных услуг, система менеджмента качества, всеобщий менеджмент качества, внутренняя оценка качества образовательных услуг.

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