

CONCEPT DEVELOPMENT SYSTEM MANAGEMENT QUARTERLY VISITATION

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Abstract. *In this article, the authors thoroughly consider the problems of reforming education at the level of modern requirements, raising its quality to the level of high requirements, and define the concept of developing a quality management system of higher education. Before creating or improving a quality management system in higher education, a broad understanding of what exactly this concept is.*

The article also describes the main features that determine the quality of the educational process, as well as defines the rules that are the basis of the concept of the quality system at the university. Based on the principles of quality management consisting of seven strategic management systems, the universal system of quality management in higher education institutions was analyzed. Formulas for determining the level of education quality in higher education institutions are given, the results to be achieved by improving the quality management system of higher education are listed.

Keywords: *education, quality of education, management, system, higher education, control system, model, method.*

I. INTRODUCTION

In recent years, large-scale work on creating a higher education system that meets the priority directions of socio-economic development and the requirements of international standards has been carried out in our country. The establishment of new higher education institutions in the regions, the opening of modern educational directions and specialties of personnel training, part-time and evening departments, and the increase of admission quotas to higher education institutions are important reforms in this direction. At the same time, there are still a number of problems that hinder the improvement of the quality of education in higher education institutions, the wide-ranging reforms implemented in the republic, and the active participation of these institutions in social and economic reforms, in particular:

- firstly, the process of organizing teaching in the higher education system, the system of evaluating the knowledge of students receiving education does not meet today's requirements;
- secondly, the absence of a modern system for evaluating the activity, knowledge and pedagogical skills of professors has a negative impact on the quality of education;

- thirdly, the fact that the questions of the entrance test to higher educational institutions do not allow to determine the applicant's ability to think logically causes problems in the admission of talented young people to higher educational institutions;
- fourthly, higher education institutions have not become communication centers where innovative and technological ideas can be exchanged, the necessary conditions have not been created for professors, teachers, young scientists and students to take the initiative in order to systematically study and analyze existing problems and shortcomings in relevant fields and make proposals for their solutions. [1]. Reforming education at the level of modern demands requires the expectation of its quality to a high level of demand. For this, it is recommended to research the scientific bases of improving and implementing social management mechanisms in order to increase the quality of higher education.

II. MAIN PART

President Shavkat Mirziyoyev signed the decree on approval of the concept of development of higher education system of Uzbekistan until 2030 [2]. Within the framework of the concept, more than 70 target indicators planned to be achieved by 2030 have been approved. In particular, it is planned to increase the enrollment of graduates to higher education from the current 20% to 50%, to increase the number of non-governmental HEIs, including public-private partnerships (PPPs) from 5 to 35, and to increase the credit-module system from 2% to 85%. The main goals of the concept are to develop PPP in the field of higher education, to increase the level of deprivation of higher education from 50 percent based on the establishment of state and non-state higher education institutions in the regions, and to create a healthy competitive environment in the field.

In higher education institutions, the learning process is transferred to the step-by-step credit-module system. Based on international experience, the introduction of advanced standards of higher education, including the step-by-step transition from education focused on acquiring theoretical knowledge to the educational system focused on the formation of practical skills in study programs.

The concept of "University 3.0", which implies the inextricable connection between the activities of education, science, innovation and commercialization of research results, is gradually introduced in higher education institutions [3]. It is aimed to establish technopark, foresight, technology transfer, start-up, accelerator centers in educational institutions and bring them to the level of scientific and practical institutions that research and forecast the socio-economic development of the relevant industry, sector and region.

The change in qualitative approaches to the study of the multi-level structure of modern education requires the development of new methods and methods related to modern institutional and global changes [4]. Today, it is necessary to study, analyze and optimally manage the education system as a whole. Such a scientific approach helps to solve complex issues in the educational system. in short, it is necessary to create social mechanisms and technologies in education management in the future and achieve optimal management through them.

Quality management system in institutions of higher education is a set of organizational structure, methodologies, processes and resources necessary for the implementation of continuous management, planning, and provision of educational quality. Quality is the main document of the system. It defines the quality management system and its purpose, as well as the commitment of top management to achieve these goals.

The quality management system covers the pedagogical, scientific, administrative and economic spheres of higher educational institutions. These areas are interrelated and often intersect. The operation of the quality management system is carried out with the involvement of all employees of the university in this process, in which, of course, the management must take full responsibility for achieving the goals in the field of quality.

The basis of the concept of the quality system in the higher educational institution is the following rules:

- 1) A quality system ensures that tasks that can only be solved by an effective management system are fulfilled. This is not an end in itself, but one of the means to achieve the common goal - to increase the quality of education;
- 2) quality system is a corporate system, the success of its creation and implementation directly depends on the participation of the entire university team in this process;
- 3) the main goal of creating a system is to increase the efficiency of the educational process, therefore, the most important task is to select work criteria, measure them and communicate the results to all participants of the process.

According to this approach, the most important document of the created quality system is the strategic plan of the university - the concept of development of the educational institution. This concept is multi-level and includes the following:

- at a higher level - the concept of the development of the university as a whole and the concept of the development of the main directions of its activities (educational, scientific and production);
- at the upper level - concepts of development of higher faculties created on the basis of high-level documents and defining the goals and tasks of development at the faculty level;
- at the lowest level - concepts defining the development of university departments (departments, services, departments), the goals and tasks of their development.

Clarification of the conceptual approach allows us to develop the principles of creating and improving the quality management system in higher educational institutions.

The model of the universal quality management system based on the principles of quality management in higher educational institutions consists of seven strategic management systems: management system, research, scientific, financial, social, economic system and information technology environment [5].

All these systems are interdependent and aimed at achieving common strategic goals under the auspices of a high-tech information-technological environment.

The unifying and guiding management system is the management system that activates all other systems: "task - foresight - strategy - planning - performance indicator - management".

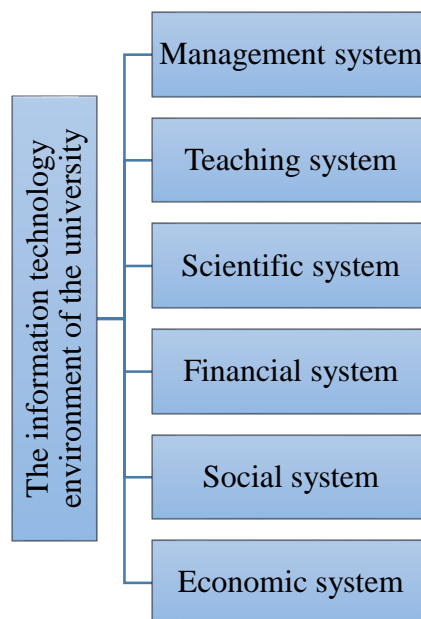


Figure 1. System of strategic management of educational quality

Due to the approach to the creation and structure of systems, the variety of models of quality management of higher education is filled and expanded within each model, depending on the specific content of the used assessment features. This specificity is determined by the structure and content of quality control and assessment procedures. There are different approaches to choosing assessment methods.

Russian scientists V.N. Nuzdin, G.G. Kadamtsseva, E.R. Panteleev, A. Tikhonov propose to measure the quality level of the university using the system of calculation formulas [6] from the point of view of the concept of multidimensional quality. It is proposed to measure the level of educational quality of higher educational institutions with the following formula:

$$Q(\text{sif}) = (Q(\text{head}) + Q(\text{mut}) + Q(\text{mah}) + Q(\text{nauka}) + Q(\text{proch}) + Q(\text{ijt}) + Q(\text{tex}))/7 \quad (1.)$$

Here:

$Q(\text{main})$ - effectiveness of educational quality management processes;

$Q(\text{mut})$ - sum of quality of university specialties;

$Q(\text{mah})$ - sum of the quality of products for educational purposes developed by the university;

$Q(\text{science})$ - the sum of the quality of scientific works of the university;

$Q(\text{proch})$ - sum of other services and goods of the university;

$Q(\text{ijt})$ - sum of the quality of the higher social system;

$Q(\text{Tex})$ is the total quality of the technical system of the university.

Each factor of the formula for awarding the quality of Oliygoxring, in turn, is determined by the formula based on the factors that form its quality. For example, the quality of specialties ($Q(\text{mut})$) is determined by the following formula:

$$Q(\text{mut})_j = (Q(\text{in})_j + Q(\text{oqit.jar})_j + Q(\text{chik})_j + Q(\text{resources})_j)/4 \quad (2)$$

Here: $Q(\text{mut})_j$ is the quality of the j -th specialty of your university;

$Q(\text{kir})_j$ - quality of input of specialty information;

$Q(\text{ukit.jar})_j$ - the quality of ukitting processes in the j -th specialty;

$Q(\text{chik})_j$ - the quality of the test results in the j -th specialty;

$Q(\text{resources})_j$ is the quality of the resources of the j th specialty.

Quality management systems should be flexible, which allows to ensure the quality of not only the entire university activity, but also faculties, specializations, individual educational programs. Such "modularity" allows for the certification or accreditation of individual structural units of the higher education institution, if it is not ready for such a grant at all, and it allows to use the experience of improving quality management systems in other departments [7].

The experience of world leaders in the field of education shows that the basis of a competitive strategy is focused on quality with a quality management system that meets the requirements of international standards of the ISO 9001 series. In this regard, improving the quality of educational services of higher educational institutions is considered as a strategic goal within the framework of state tasks and as a means of ensuring vital activity, development and well-being of the university within the framework of tasks. Today, the university must recognize its position as a "market entity" and therefore recognize that all the laws of the market economy, the laws of the struggle for survival and "natural selection" apply to the market for educational services.

Improvement of the quality management system of universities is carried out under the following conditions:

- creation of an internal system in higher education institutions to ensure the quality of personnel training in the main areas of higher education institutions' activities (education, research, scientific-pedagogical personnel training, educational, financial, informational, social, economic, administrative-management);
- increase the position of reflective ability in the responsibility for the results of students' (different levels) and teachers' work;
- increase consumer confidence in university graduates (state bodies, enterprises, organizations);
- formation of the implementation of economic mechanisms for the development of the educational system of higher education institutions, improvement of the economic situation of employees at all levels;
- reorganization of the educational process management system for the purpose of mobilizing all internal resources and reimbursing expenses;
- understanding of the importance of the quality management system of the university by the whole team;
- increasing the responsibility and clear distribution of powers of employees at all levels (teachers, departments, deans, rector's office);

Solving the main problems of the quality management system - introducing the approach and ideology of the total quality management (TQM) process, eliminating cross-functional obstacles and forming a high quality team [8].

The quality of education and professional training of personnel are the main input parameters of the educational system. It includes the following:

- people - teaching staff, students, teaching assistants, administrative staff;
- technology - pedagogical, educational, informational, management, control, etc.;
- material and technical support - buildings, machines, laboratory-practice base; - normative-legal and educational-methodical support;
- incentives;
- external influences - requirements of the market economy, on the individual, society and the state. A systematic approach should be used to solve the problems of educational quality. All

factors must be managed together. The fall of any factor from this chain leads to a violation of the educational quality management system.

Internal models of higher educational institution of quality management try to combine (reconcile) different concepts of quality, to "fix defects" in the state control system. Most of these models are based on one of three quality management methods (approaches):

- evaluation method of quality management (SWOT - analysis);
- a concept based on the principles of total quality management (TQM);
- An approach based on the requirements of ISO 9001:2000 international quality standards. The management model based on the evaluation method envisages regular self-assessment to identify the strengths and weaknesses of the higher education institution, as well as the positive and negative factors in its development. On this basis, measures are developed and proposed to solve problematic situations and improve the activities of the higher educational institution.

III. CONCLUSION

In conclusion, today, it is necessary to study the Japanese miracle based on education and science, to revise the system of training of personnel with high professional skills and moral power, which is suitable for competition in the conditions of global development, in particular, to improve the management system of higher and secondary special educational institutions with a cybernetic approach. Creation and introduction of a complete automated system of the education system in Uzbekistan is the need of the hour. This system mainly consists of economic, sociological, mathematical, private algorithm, modules and a set of programs. If this structure is called "innovative educational model of the Republic of Uzbekistan", it is appropriate. Such miracles are the development of complex plans for the creation of a model of education, and in it the President

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