

METHODS TO IMPROVE THE QUALITY OF EDUCATION IN THE HIGHER EDUCATION SYSTEM OF THE REPUBLIC OF UZBEKISTAN**Safarov Shokhrukh Sattor ugli**

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<https://doi.org/10.5281/zenodo.19224794>

Abstract. *This article provides a comprehensive analysis of the process of training highly qualified specialists in higher educational institutions, in particular, current issues related to the management of personnel training within the framework of Bachelor's and master's degrees. Scientific and practical proposals and recommendations have been developed aimed at effectively solving these problems. This article provides a comprehensive analysis of the process of training highly qualified specialists in higher educational institutions, in particular, current issues related to the management of personnel training within the framework of Bachelor's and master's degrees. Scientific and practical proposals and recommendations have been developed aimed at effectively solving these problems. The article also lists the results of a survey of graduates of higher education institutions located in the Kashkadarya region of the Republic of Uzbekistan. Within the framework of the study, the quality of training in the field of Higher Education Management, the model of improving the effectiveness of Educational Management, practical recommendations for heads of higher educational institutions and graduates, as well as the main directions of public policy in the field of higher education are highlighted.*

Keywords: *state, society, periodicals, specialist, marketing service, enterprise, institution, education expenditures, higher education system, management effectiveness, higher education institutions, higher education, coverage level, qualifications, teacher, labor market, specialty, education quality, highly qualified personnel, management, educational management, employment, graduate, bachelor's degree, master's degree.*

Introduction. In recent years, much attention has been paid to the management of training highly qualified competitive personnel for higher educational institutions around the world, including in the Republic of Uzbekistan. Times Higher Education magazine has published its ranking of the world's best universities for 2014-2015.. The results show that the top three universities remained unchanged: California Institute of Technology, Harvard and Oxford, with Lomonosov Moscow State University ranked 196th. Moscow State University, Novosibirsk State University and Moscow Institute of Engineering Physics are among the top 100 universities in the world in the field of natural sciences. Moscow State University is also among the top 100 in the field of engineering and technology.

The President of the Republic of Uzbekistan Sh.M. Mirziyoyev noted the following: "today, according to UN data, the state budget of our country's expenditures on education accounts for more than 35 percent. According to the results of a study conducted in 2021 by the World Intellectual Property Organization and one of the leading international business schools, INSEAD, on the level of human capital development, Uzbekistan ranked 53rd among 141 countries in the world; Our country is ranked 5th in the world in terms of the education system and the share of funds allocated for educational purposes. According to the results of the World University Rankings 2026, published by the international publication Times Higher Education (THE) on October 9, 2025, Uzbekistan's higher education institutions have made significant

progress in the world rankings¹. According to the results of this rating, it can be noted that for the first time the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers entered the TOP-600 (501-600) of the world's universities, Tashkent State Technical University took a place in the 1001-1200 range; National University of Uzbekistan named after Mirzo Ulugbek - in the 1201-1500 range; Tashkent University of Information Technologies - in the 1501+ category.

In addition, 58 higher education institutions were included in the list as reporters (applicants).

It is worth noting that 2,191 universities from 115 countries and territories participated in the 2026 ranking, including 17 universities from Central Asia and the Caucasus region, and for the first time, four universities were listed among higher education institutions operating in the Republic of Uzbekistan.

The Times Higher Education World University Rankings is one of the most prestigious international rankings in the world, which assesses the performance of higher education institutions in 5 main areas: quality of education, research environment, scientific impact, international openness and cooperation with industry. This means that in managing the training of highly qualified competitive personnel, the ratings of higher education institutions, the integration of science, higher education and production, and most importantly, the quality and efficiency of higher education play a significant role. Ensuring the quality of education in the continuing education system, including in higher education institutions, places a great responsibility on all participants in continuing education, professors and teachers of higher education institutions and graduate students, and requires tireless work. Therefore, achieving social efficiency in this area is a major effort that must be made jointly by the heads of institutions, responsible employees, heads of departments, professors and teachers, and students, in accordance with the goal of ensuring the quality and efficiency of education in institutions.

The following requirements are imposed on highly qualified graduates of the university: to have a good knowledge of the technical characteristics of their specialty and profession; to be responsible, creative-thinking, disciplined, hardworking and spiritual, focused on the future, to participate in training courses in accordance with educational programs based on state educational standards, to understand and implement the assigned tasks, to become competitive highly qualified personnel, and to work tirelessly in their field for the welfare of society and the independence of the country.

In order to compare theoretical data with practical results, that is, to determine the demand for professional qualities of highly qualified personnel in the labor market, we conducted a survey among managers (specialists) of five enterprises in the Kashkadarya region of the Republic of Uzbekistan. The survey results show that, in addition to knowledge, skills and qualifications in the specialty, other competencies are also required to perform the tasks of the job description, in particular, the effective use of working time, competent expression of one's thoughts, analysis, accurate work in stressful situations, quick assimilation of new information, preparation of reports, work on a computer and the Internet, motivating other people to work, etc. A graduate (employee) with the above qualities is a competitive, flexible, highly qualified personnel. This does not mean that a university graduate in most cases does not need knowledge in the specialty, but this knowledge is not enough for a graduate to work independently and effectively.

¹ <https://kun.uz/kr/news/2025/10/11/ozbekiston-universitetlari-ilk-bor-nufuzli-xalqaro-reytingga-kirdi>

Research methodology. The research used methods such as comparing statistical data, conducting surveys, integrating theoretical information into statistical data, and studying the opinions of authors.

Results. In the process of training competitive highly qualified bachelors and masters in educational institutions, the following problems arise, the urgent solution of which is obvious and urgent: a shortage of highly qualified professors and teachers and personnel with scientific degrees; insufficient development of mechanisms for the formation and implementation of state educational standards in certain areas of the bachelor's degree; in many cases, students of bachelor's degree programs and master's degree specialties are not sufficiently provided with high-quality, scientific and technical, educational and methodological and periodical literature; the existence of a discrepancy between the material, technical and information base of educational institutions and research institutions and current requirements; the lack of timely and sufficient orientation of science to changes and innovations in the socio-economic sphere; the discrepancy between the quality of the educational process and current qualification requirements set for the university; graduates in many departments of organizations, enterprises and institutions; The deterioration of the material situation and the decline in the social status of scientific and scientific-pedagogical personnel in relation to other categories of specialists; poor organization of marketing services in the higher education system, lack of modern bachelor's programs and master's specialties; insufficient justification and multifacetedness of the mechanism for financing the higher education system, optimization of training costs and development of financial and credit instruments, reimbursement of state expenditures on personnel training, etc. lead to a quantitative and qualitative imbalance between supply in the labor market and demand for graduates.

Today, improving the quality of educational services in higher education institutions is considered a strategic goal and a means of ensuring the life, development and well-being of an educational institution within the framework of state goals and the goals of higher education institutions. Today, a higher education institution must recognize itself as a market entity and therefore understand that all the laws of a market economy also apply in the educational services market, that various methods of struggle for survival are used, and that "natural selection" exists.

The quality management system of a higher education institution combines the organizational structure, methods, processes and resources necessary to implement management based on planning, organization, coordination, control, and improvement. Quality management defines the purpose of creating a system and managing it. The quality management system covers the pedagogical, scientific, administrative and business areas of a higher education institution. These areas are interconnected and often intersect. The quality management system is implemented by involving all employees of a higher education institution in this process.

Administrative management processes within the framework of the quality system of a higher education institution are based on management by actual indicators and are designed to ensure continuous improvement according to the criteria of "process efficiency" at the final stage. The efficiency of a process is understood as its contribution to the fulfillment of the objective function of quality policy, taking into account the costs of all types of resources. When developing a concept for improving the quality of education, it is necessary to answer the following questions: what does the quality of education mean, what role should the quality system of a higher education institution play in solving the general task of improving the quality of education. How to create such a system?

Many experts around the world are working to prevent the above-mentioned problems.

These problems are related, in particular, to the quality of teaching and the quality of education. In this regard, K.M. Almakuchukov writes: "the criteria for assessing the quality of education in universities are the following parameters: the level of qualification of professors and teachers; the educational and methodological process; the state of the material and technical base; the intellectual potential of students. The criteria for assessing the quality of education in higher educational institutions are the following parameters: demand for graduates; career; assessment from the point of view of employers; "university - production" relations; absence / presence of complaints".

On April 30, 2025, the President of the Republic of Uzbekistan Shavkat Mirziyoyev reviewed the presentation of measures to improve the system of non-state educational services and improve the quality of higher and vocational education². The meeting noted that the development of economic sectors and the investment climate are closely related, first of all, to human resources, therefore, the system of higher and vocational education is constantly being improved, and in recent years, due to the opportunities provided to the private sector in the field of education, 71 private higher educational institutions and 51 private technical schools have been established, where about 500 thousand students and pupils are studying, as a result of which the coverage of higher education in the country has increased from 9 percent to 42 percent.

The work carried out in the Republic of Uzbekistan so far has enabled many young people to receive professional and higher education. However, the quality of education is not ensured equally in all non-state educational organizations. One of the most important issues is to improve the quality of admission parameters, educational programs, educational processes and scientific potential in non-state educational organizations, and adapt them to the needs of the modern labor market. Therefore, the presentation discussed proposals aimed at regulating the provision of non-state educational services, improving the licensing system and introducing a new system for state accreditation. In this regard, proposals were made to transition to a two-stage licensing system based on advanced foreign experience, conduct special accreditation of educational programs, and organize comprehensive state accreditation every five years. In addition, the presentation also put forward the initiative to establish a separate independent structure for external assessment of education quality and introduce a transparent, impartial and fair system of quality control, based on the best practices of developed countries. Ensuring the quality of education in higher education institutions and introducing external assessment will increase the efficiency and scientific potential of teaching in vocational and higher education institutions, and improve their position in international rankings.

President Sh.M. Mirziyoyev believes that the country "needs a fundamental new assessment of the quality of education." He emphasized that the quality of education should be assessed "based on criteria provided by society, the economy, employers and the labor market".

To ensure the quality of higher education, we recommend a model of improving the quality of higher education. The model shows that there are four main goals of managing the quality of higher education. To achieve these goals, five stages must be completed. The first stage includes: managing the planning of higher education quality, the second stage is ensuring

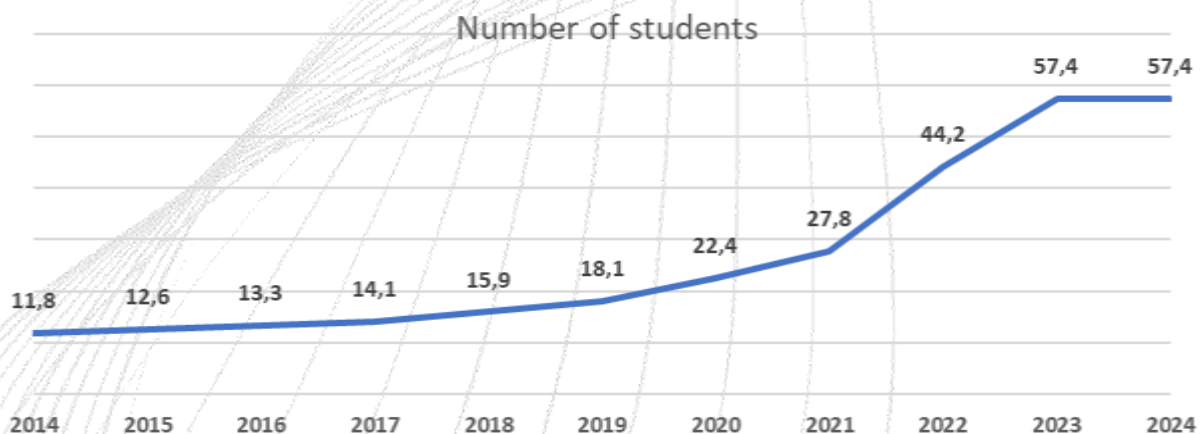
² Information from the meeting of the President of the Republic of Uzbekistan Shavkat Mirziyoyev on improving the system of non-state educational services and identifying measures to improve the quality of higher and vocational education. Measures to improve the quality of higher education were considered. April 30, 2025. Source: <https://president.uz/uz/lists/view/8093>

the compliance of educational programs with production requirements, the third stage is quality control, the fourth stage is improving the quality management process, and the final stage is assessing the effectiveness of higher education quality management, summarizing its organizational, substantive, personnel and methodological aspects and results.

Highly qualified personnel - university graduates - should be educated, highly cultured, responsible and hardworking people. From an economic point of view, the accumulation of knowledge by people is a wealth that predetermines the development of the economy, the scientific, cultural and social progress of society. According to the famous American economist T. Stonier, "in the post-industrial economy, knowledge has replaced the traditional triad of land, labor, and capital and has become the most important basis of modern production systems" [6, p. 24]. E. Toffler gives the following thoughts in this direction: "Previously, land, labor and capital were the main elements of production. Tomorrow - and in many areas this tomorrow has already arrived - information will become the main component" [7, p. 29]. T.F. Chernous writes: "Accordingly, if in an agrarian society the main limiting factor of production is land, and in an industrial society it is capital, then in an information society such a factor will become knowledge". In accordance with the adopted government resolution, it is planned to allocate more than 538 billion soums for the implementation of the program for the modernization of the material and technical base of higher educational institutions and a radical improvement in the quality of specialist training for 2022-2026.

Discussion. In order to improve the training of highly qualified personnel in Kashkadarya regional universities and meet the demands and needs of the labor market, work on training highly qualified personnel in 32 new bachelor's degree programs and 18 master's degree specialties was continued in 2023-2024.

The dynamics of indicators affecting the quality of education in higher education institutions of the Kashkadarya region of the Republic of Uzbekistan in 2014–2024 is presented in Figure 1. Analysis of the data in the figure shows that the number of students has also been steadily growing from year to year. If in 2014 11.8 thousand students studied in higher education



institutions, in 2020 this figure reached 22.4 thousand, in 2022 - 44.2 thousand, and in 2023 and 2024 - 57.4 thousand. The almost fivefold increase in the number of students reflects the increasing demand of the population for higher education and the expansion of the capabilities of educational institutions.

Figure 1. Dynamics of indicators affecting the quality of education in the activities of higher educational institutions of the Kashkadarya region of the Republic of Uzbekistan in 2014–2024.

The number of professors and teachers is increasing in line with the growth of universities and the number of students (master's students) studying in them. The number of teachers, which was 858 in 2014, reached 1,404 in 2020, and 2,031 by 2024. However, due to the rapid growth of the number of students, the number of teachers for every 5 students decreased from 0.36 in 2014 to 0.18 in 2024. That is, while in 2014 there were an average of 14 students per teacher, in 2024 this figure reached 28. This situation seriously threatens the quality of education, as the workload of each teacher increases dramatically, limiting the scope for educational content and individual approach.

As of 2024, the higher education sector in Kashkadarya region is rapidly developing.

While in 2014 there were only 3 higher education institutions, this figure increased to 6 in 2020 and 9 in 2023-2024. This expansion was an important step in creating more adequate and regionally closer access to higher education for the region's population (Figure 2).

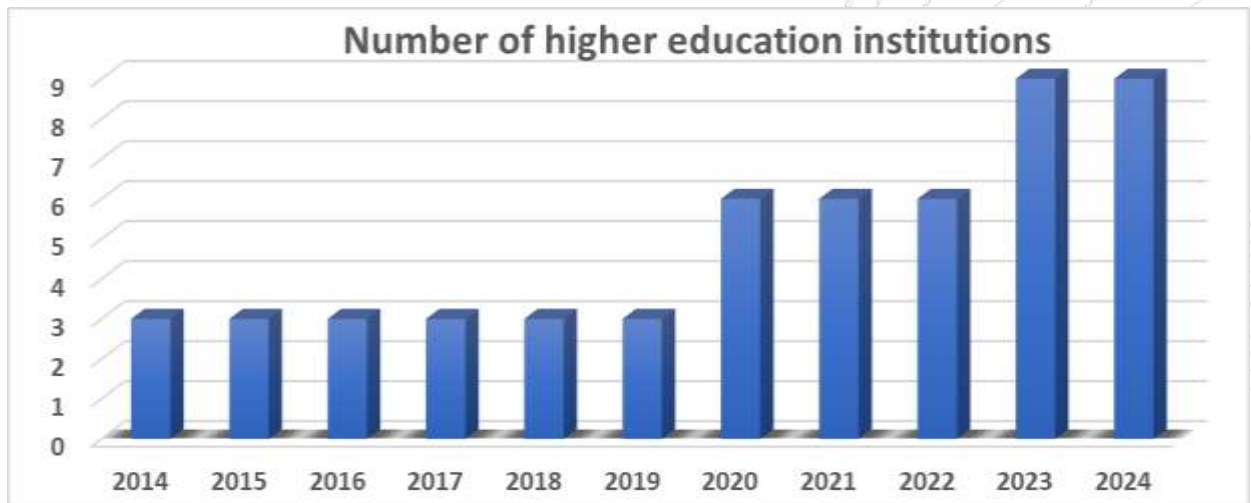


Figure 2. Changes in the number of higher education institutions in the Kashkadarya region of the Republic of Uzbekistan during 2014-2024

The shortage of academic staff is also a significant problem for the quality of education.

The number of doctors of science increased from 25 in 2014 to 87 in 2020, but has decreased in recent years and is expected to reach 70 in 2024. The number of candidates of science did not change significantly between 2014 and 2024 - it decreased from 272 to 240.

The ratio of professors and teachers with scientific degrees to students is decreasing from year to year: in 2014, there were 0.25 professors for every 10 students, while in 2024 this figure dropped to 0.05. This situation is due to the fact that the regulatory documents of the Republic of Uzbekistan stipulate the level of coverage of graduates with higher education and the increase in the scientific potential of professors and teachers in higher educational institutions, but since the increase in the level of coverage is a complex process, the increase in scientific potential is not observed in line with the indicators. This, in turn, creates a risk of a decrease in the scientific and analytical basis of the educational process, which may also negatively affect the improvement of the quality of education.

The ratio of students and graduates per 10,000 population is also an important indicator in assessing the quality of education. The number of students per 10,000 population was 40.8 in 2014 and 68.3 in 2020, while this figure increased to 129.7 in 2022 and 161.2 in 2024 (Figure 3)

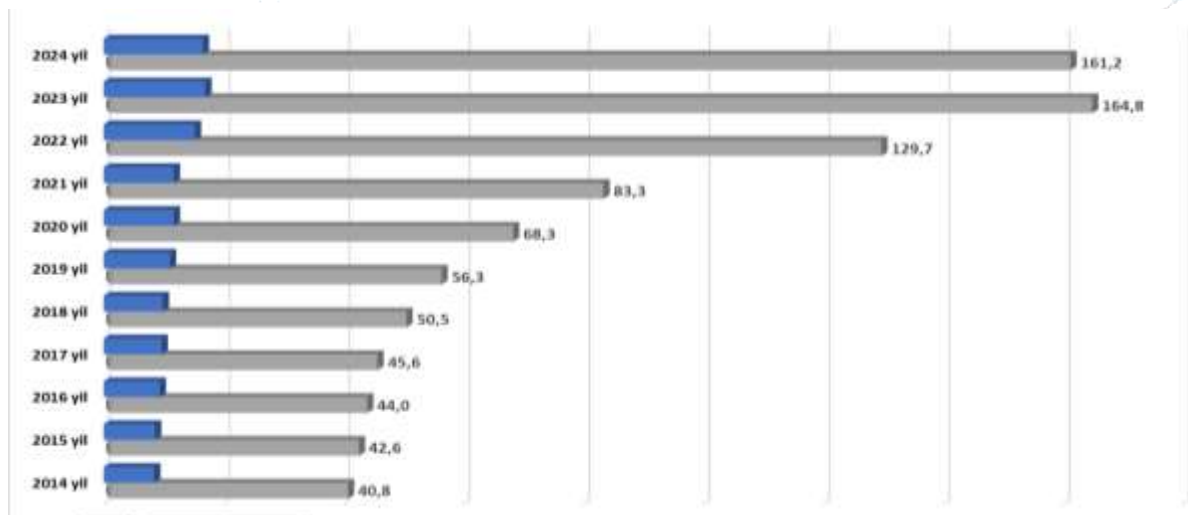


Figure 3. Percentage of students and graduates per 10,000 population

The 400-fold increase in this indicator among universities in the Kashkadarya region over the past 10 years is explained by the expansion of opportunities for admission to higher education institutions in the region, the relatively increased quality of education in pre-university educational institutions, and the implementation of national requirements in this regard.

In addition, there has been a significant increase in the number of students admitted to higher education institutions in the years after 2020. For example, while 2,836 students were admitted in 2014, this figure increased to 14,177 in 2024. According to an analysis of the proportion of graduates per 10,000 population, in the years of the study, i.e. in 2014, this figure increased by 8.44, in 2020 - by 11.71, and in 2024 - by 16.56, that is, by almost 200 times compared to 2014.

Conclusion and suggestions. The real condition for improving the education system is the development of the concept of education economics in the conditions of market relations. A higher educational institution is a mirror reflection of the economic and socio-political problems of the development of the state and society, and is also a generative mechanism for the system of obtaining and distributing modern technologies, knowledge and ideas, and the system of training, increasing, improving and retraining highly qualified personnel - graduates of higher educational institutions.

Depending on the specific object of study of social relations, higher educational institutions should be studied as a subject of the state, civil society, a specific sector of the economy of the region and the country, as a complex reproductive, intellectual system that expresses its uniqueness and individuality. Taking into account the advanced experience of foreign countries, Russia and the Republic of Uzbekistan should develop higher qualification programs adapted to the specifics of the socio-economic and demographic situation of a particular object.

Analyzing the definitions of educational quality by various authors, we can conclude that educational quality is an integral feature of educational processes, but there is no single concept of quality. Often, educational quality is considered both as suitability for purpose and as compliance with requirements. In order to successfully operate in today's conditions, a modern university must define its own concept of educational quality, which will allow for the effective implementation of appropriate quality assurance mechanisms in accordance with modern quality assurance standards in higher education.

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