



Scan me!



Innovative Aspects of Reforming Higher Education in the New Uzbekistan

Abdusalom Umarov  [orcid: 0000-0003-2408-3624](https://orcid.org/0000-0003-2408-3624)
e-mail: rektor@utas.uz

DSc., Professor, Doctor of technical sciences, Department of Materials Science and Mechanical Engineering,
The rector of University of Tashkent for Applied Sciences, Tashkent State Transport University ,
Tashkent, 100000, Uzbekistan.

<https://doi.org/10.5281/zenodo.15174236>

Annotation. The article notes that in the new Uzbekistan, ensuring the effective use of the intellectual and scientific potential of non-state universities is one of the priority, pressing problems in the process of training highly qualified personnel. In the conditions of the new Uzbekistan, large-scale reforms are being carried out in the system of non-state higher education. All this is aimed at solving the strategic task of educating and training competitive personnel, which is closely related to providing ample opportunities for young people to set ambitious goals and achieve them in their lives.

Key words: non-state university, personnel, new Uzbekistan, science, resource center, student, economics.

1 Introduction

In the context of the new phase of societal development and the deepening of reform processes, the role and significance of qualified personnel are becoming increasingly important. Bachelors and Masters with high qualifications are becoming the main support and potential organizers of small businesses, newly established small industrial zones, including joint ventures, the banking system, and the agricultural and social sectors. The preparation of modern, competitive personnel is closely connected with the process of ensuring sustainable development, defense capability, information security, the production of high-quality goods that meet the requirements of the global market, the further development of foreign economic relations, and the enhancement of the country's prestige on the world stage. One of the important tasks of universities is to provide educational institutions – preschools, secondary schools, academic lyceums, professional colleges, and technical schools – with highly qualified teachers, educators, and psychologists. In the context of higher education reform, the country's leadership has paid special attention to the creation of new medical universities, branches of the Tashkent Medical Academy in the regions, and the establishment of joint medical faculties with renowned foreign universities. Therefore, this social and socio-economic issue, which concerns a multimillion-strong youth audience as a potential social link from various layers of society, raises the task of ensuring equal opportunities for them to enter universities in their chosen specialties. Continuing the course of comprehensive support for youth participation in reform processes, the year 2024 has been declared the «Year of Youth and Business Support» in Uzbekistan. The name of the year once again underscores the role of higher education in the strategic development of the new Uzbekistan. It is also necessary to note that state support is an important factor in the further development of the higher education system in the country. In the conditions of the new Uzbekistan, large-scale reforms have been carried out in the education system. Considering that applicants are prepared in schools for university entrance, new teaching methods have been introduced in schools in the new Uzbekistan, taking into account advanced pedagogical technologies from developed countries. In particular, Finland's pedagogical experience is being integrated into schools. All of this is aimed at solving the strategic task of educating and preparing highly qualified personnel, which is closely linked to providing young people with broad opportunities to set ambitious goals and achieve them in their lives.

It should be emphasized that the preparation of talented youth for university admission is connected with the following factors: Firstly, this process urgently necessitates the improvement of educational and career guidance work among graduates of secondary schools, academic lyceums, professional colleges, and technical schools. Comprehensive work is required with the participation of representatives from government and youth

organizations, industrial enterprises, and farming enterprises. Secondly, the systematic work of each university's admissions committee with its future students is crucial. This includes holding regular meetings, utilizing the opportunities provided by mass media, and producing informational materials containing details about the specialties offered at the university. Thirdly, regular work with university alumni is of great importance, as they provide reliable information to secondary school students, graduates of academic lyceums, professional colleges, and technical schools. Fourthly, the influx of talented youth into universities is closely linked to the university's ranking among other higher education institutions in the country and abroad. This task urgently dictates the need to improve the international ranking of higher education institutions and further expand international relations between universities and leading universities in developed countries around the world. As the head of state noted, «Special attention will be paid to increasing access to and the quality of higher education. Starting next year, the number of state grants for higher education will be increased by at least 25 percent. We will double the quota of scholarships for girls from low-income families and raise it to 2,000. For girls who need social support and are excellent students, special scholarships will be introduced.» [1.,2.]

In Uzbekistan, «youth aspire to enroll in the most prestigious universities, but there is no competition among universities to attract educated and talented youth. In this regard, a system will be introduced to provide private universities with government orders for the training of in-demand specialists.» [2.,2].

The reform of the higher education system and the improvement of the preparation of highly qualified personnel for socio-economic sectors are closely linked to the involvement of highly qualified faculty members, as well as the modernization of the educational process aimed at preparing future bachelors and masters. This issue is often related to providing them with adequate social protection, increasing salaries, and offering various incentives. The country has established a system for defending dissertations in various scientific fields, with the first stage being the PhD and the second stage the DSc. It is important to note that universities have created opportunities for extensive experience exchange, participation in international scientific and practical conferences, including trips to foreign universities, and professional development at leading global scientific centers.

During the new stage of the country's development, a legal, scientific-methodological, and economic foundation has been established to increase the number of non-state higher educational institutions. A key factor in their establishment in the educational services market is the expansion of international relations with foreign universities. The practice of creating branches of leading universities from developed countries is becoming more common. One of the innovative approaches to organizing the training of qualified personnel has been the creation of joint international educational programs. A new method for addressing the social demands of youth has been the increase in the number of places available for university applicants-graduates of secondary schools, academic lyceums, professional colleges, and technical schools-by providing the opportunity to apply to several universities simultaneously and allowing applicants to submit documents for participation in entrance tests electronically. Additionally, applicants have been given the option to participate in testing at their place of residence, with the necessary conditions provided by the Republican Testing Center. Beginning in 2024, a new practice is being introduced whereby applicants can choose their university after the announcement of test results. Another significant development in the country has been the introduction of a system that allows universities to independently determine the number of students admitted to the first year, taking into account the number of faculty members, scientific-methodological resources, information resources, and material and technical capabilities. A notable event in the reform of higher education has been the opening of evening and correspondence faculties, as well as the admission of bachelor's students for a second specialty. This issue is directly related to the reform processes in society, as universities have increased student intake considering the demands and orders for specialist training from private and joint ventures, with the aim of providing small business entities with highly qualified personnel. Furthermore, social progress, the systematic increase in requirements based on the suggestions of employers, government bodies, private sector representatives, and non-governmental organizations, and the need to ensure competitive personnel for all sectors of the economy and social sector have necessitated the use of innovative methods and the acceleration of deep reform throughout the higher education system. Considering the reform of the economic complex and to meet the needs of technical specialties in production, starting from the current 2024-2025 academic year, a technical university will be established in each region of the country. To further improve working conditions in universities, the teaching load of faculty members will be optimized.

2 Relevance and Research Objectives

An innovative approach to the process of reforming higher education has demonstrated that a crucial method for expanding the admission of creative young people to universities lies in the recognition of the need to fundamentally improve the preparation of bachelors and masters. This is also related to the expansion of the private sector, the extensive attraction of foreign investment, and the opening of numerous joint ventures in the country, all

of which impose new demands on the quality of personnel training. However, during the structural transformations, it became evident that a significant portion of university graduates is not prepared for these challenges. Their theoretical and practical knowledge, qualifications, and skills do not meet modern requirements. A thorough analysis of the personnel training process shows that many graduates are poorly oriented toward practical work in this new stage of development. They have limited understanding of the socio-economic problems occurring within society, especially in the context of deepening market economic relations.

Reforming the workforce training process places a significant emphasis on the need to encourage academic, research, and innovative comprehensive work within universities, as well as the creation of mechanisms to implement their achievements in practice. Uzbekistan has undergone profound legal, socio-economic, and cultural transformations, which require highly qualified personnel. «Speaking of the tasks ahead in the economy, it should be noted that the essence of large-scale economic reforms lies in the preparation of qualified personnel capable of actively participating in the achievement of strategic economic development goals.» [3.2.] However, a scientific analysis conducted by scholars and social science representatives indicates that the current state of higher education in Uzbekistan does not meet the demands of society. This shortfall is primarily due to the fact that during the early stages of independence, the system for training highly qualified personnel did not account for the profound changes in the socio-economic development of the country, particularly concerning the deepening of the market economy and the country's integration into the international community. At this new stage of development, the country's leadership has tasked the higher education system with an innovative challenge: to ensure the training of personnel that aligns with the country's reform processes, meets international standards, achieves a competitive level, and responds to the challenges of globalization. The new stage of development in the country has seen the launch of large-scale liberal reforms, which have significantly adjusted the country's foreign policy. In particular, relations with neighboring countries, including the Kyrgyz Republic, are a priority in the foreign policy of the Republic of Uzbekistan. Foreign investments are a crucial factor in the country's economic growth, making good neighborly relations essential for Uzbekistan to implement its new course. Therefore, active efforts are underway to join the World Trade Organization, engage in extensive cooperation with the European Union, and implement the standards of the Eurasian Economic Union. [4..2.] At the current stage of societal development, the country's higher education system is intended to prepare personnel for subsequent employment in various sectors of socio-economic activity, as well as in management structures, service, scientific, economic, and technical fields. The higher education system is responsible for providing future specialists with skills and specialized knowledge, guiding young people to explore the theoretical or practical aspects of their chosen profession, and fostering the creative application of the latest scientific and technological achievements.

In the period of deepening market relations, the role and importance of personnel in ensuring the sustainable development of the country, national defense capability, food and public security, moral education of youth, formation of environmental and political culture, and the production of competitive, export-oriented goods is becoming increasingly relevant. This task urgently dictates the need to «raise the prestige of our universities, increase the number of non-state educational institutions, attract qualified personnel to the sector, and intensify competition.» [5.,1.]. The comprehensive conditions created for the development of the private sector and new entrepreneurial structures impose even more innovative requirements on the quality of high professional training, communication skills, and foreign language proficiency among bachelors and masters. However, «during the structural transformations, it became clear that a significant portion of specialists is not prepared for these challenges; their knowledge, qualifications, and skills do not meet modern requirements. For example, at the initial stage, it is necessary to send more than 3,500 specialists abroad for training in master's and doctoral programs, advanced training, and internships. There is a need for over 600 compatriots with international scientific and practical experience. It is necessary to engage about a thousand foreign scientists and experts for cooperation.» [6.,1.].

The Cabinet of Ministers of Uzbekistan has approved the Strategy for the Innovative Development of the Agricultural Education System until 2030. By Government Decree (No. 788, dated December 15, 2020), information technologies, including «Smart Agriculture,» are being introduced in the country's agricultural sector. By 2030, it is planned to increase the number of interactive services provided in the agricultural sector to twenty.

According to the Strategy, the branches of the Tashkent State Agrarian University – Nukus, Termez, and Samarkand – are planned to be transformed into independent higher educational institutions. In all areas of specialist training (bachelors and masters) in the agricultural sector, the gradual implementation of the credit-modular system of organizing the educational process will begin from the 2020-2021 academic year. It is important to note that the credit-modular system is created in accordance with the Bologna Declaration based on the principles of a tiered education system and is developed according to the norms of the European Credit Transfer and Accumulation System (ECTS). According to the European Credit Transfer and Accumulation System, the

assessment of students' knowledge, as well as the comparison of results, is carried out through a unified interstate procedure. [7.,2.]

3 Materials and Methods of Research

The methodological foundation for studying the problem of the reform process in higher education under democratic reforms and the new stage of the country includes the Constitution of the Republic of Uzbekistan and the adoption of the new version of the Law «On Education» (2020), as well as the works of the President of the Republic of Uzbekistan, Sh. M. Mirziyoyev. Valuable sources include individual studies by sociologists, economists, philosophers, and the works of scholars published in scientific collections from scientific-practical conferences. It should be noted that there are some brochures and articles where the issue of higher education reform and international cooperation in personnel training are partially addressed. However, the innovative aspects of higher education reform in the context of the new stage of the country's development are poorly studied, and there are no specific approaches to researching the problem considering the features, ranking, faculty staff, material and technical, and information-resource base of higher educational institutions.

In Uzbekistan, a concept for further improving higher education has been approved. Measures for improving the system related to the organization of the educational process in higher educational institutions were approved by the Cabinet of Ministers of Uzbekistan under number 824 on December 31, 2020. The system for paying faculty members working in technical schools affiliated with universities has been adjusted. Educators will receive hourly pay similar to that of their colleagues teaching university students. Higher educational institutions now decide whether to have a five-day or six-day academic week. One of the measures for the liberalization of higher educational institutions is that now rectors and directors of university branches are empowered to appoint chairpersons of the final state certification commission created in the institution. The educational process will also gradually transition to a credit-modular system. Opportunities for faculty to undergo internships and additional training at foreign institutions of corresponding profiles are expanding, with mandatory subsequent service at their «home» university. [8.,2.]

In the higher education system, considering international practices in personnel training and changes in the socio-economic development of the country, «training is established in over 100 new bachelor's programs and 94 master's specializations.» [9, p.1] To further improve the educational process, «in 2021, 30 leading universities in the country will gain the right to independently develop curricula, set admission quotas, and manage financial matters.» [10., 2.]

Research into reform processes in society shows that as a result of systematic work aimed at reforming the higher education system, «in 2020, 25 percent of graduates from secondary schools, academic lyceums, and professional colleges entered universities. Over the past four years, 47 new higher educational institutions have been established in the republic.» [11, p.2]

The country has begun the development and phased implementation of new curricula and programs for new specializations. Internships at joint ventures for faculty members of specialized university departments are being introduced, as well as systematic qualification practices for students and practical training in production. Each university is implementing phased instruction in specialty disciplines in English. For promising scientific and pedagogical personnel, internships in developed countries are introduced, and the system of personnel training in master's programs is critically analyzed. An important step is the enhancement of the status of university departments with increased responsibility for ensuring the quality of education. It is planned to approve development concepts for each university associated with a specific industry until 2030 and to ensure that at least one university from each industry is recognized by leading international rating agencies. Basic universities will independently develop curricula and course programs based on the needs of personnel demand. To prevent the wastage of working time on activities unrelated to the educational process, new mechanisms for regulating faculty and teaching staff workload will be introduced. The principle «student performance level - the main criterion for evaluating the activities of professors and teachers» will be implemented, along with modern methods of monitoring and assessing student knowledge.

One of the primary goals of higher education reform is to ensure the real independence of universities in personnel training and scientific research activities. An important criterion to prevent a decline in the quality of higher education will be the presence of faculty members with academic degrees. Measures are being taken to prepare highly qualified personnel for work in university departments. In the 2019-2020 academic year, the country's universities employed 6,401 candidates of sciences, 4,645 associate professors, 1,811 doctors of sciences, and 1,326 professors. [12, p.2]

In the current conditions, issues of stimulating scientific research and innovation activities and creating mechanisms for implementing their achievements into practice have become particularly important for universities.

To achieve these goals, a two-level postgraduate education system has been introduced, including basic doctoral studies (with dissertation defense and awarding the degree of Doctor of Philosophy - PhD in the relevant field of science) and postdoctoral studies (with dissertation defense and awarding the degree of Doctor of Sciences - ScD). To elevate the organization of scientific research activities to a qualitatively new level, measures have been taken to further improve the activities of the Academy of Sciences of the Republic of Uzbekistan, defining the main tasks and priority areas based on modern requirements, with special attention given to stimulating effective scientific activity. The liberalization of dissertation defenses for the PhD degree has continued with the establishment of specialized councils at regional state universities. Work has begun on creating private universities and opening branches of leading universities from developed countries, which will increase opportunities for youth to receive higher education in their chosen fields. As a result, conditions will be created to transform the country into an educational center of Central Asia for training highly qualified specialists within 10 years.

This process presents the task of increasing the number of international students, which is crucial for enhancing the competitiveness of the higher education system and important for popularizing the country's modern intellectual image in the global community. «In the 2020-2021 academic year, 1,500 foreign students from 16 countries studied in 11 medical higher educational institutions in Uzbekistan. In the 2020-2022 academic year, it is expected that 10,000 foreign students from 50 countries will be trained.» [13., p.2.]

Practical measures are being taken, and a program has been approved for sending faculty members abroad for internships and professional development. The higher education system in the Republic of Uzbekistan includes universities specializing in academic and professional programs in accordance with state standards. All of them are not directly dependent on departmental subordination or ownership forms; institutions engaged in scientific, pedagogical, and research activities necessary for the functioning of universities, as well as structures involved in state management of higher education, are part of this system. Branches of several leading universities from Europe, Asia, the United States, the Russian Federation, South Korea, Turkey, Austria, and the United Kingdom have been opened in the country.

Measures are being taken to increase opportunities for studying abroad. «It is necessary to strengthen connections with leading foreign universities, scientific and innovation centers, and expand cooperation with them in the field of personnel training. In this regard, the number of young people sent to study for master's and doctoral degrees at foreign universities through the 'El-Yurt Umidi' Foundation will increase fivefold in 2021. For the first time, we will send 100 of our young men and women to study for bachelor's degrees abroad. In subsequent years, their number will grow 2-3 times.» [14., p.2.]

The country has begun developing and gradually implementing new curricula, programs for new specialties, and introducing internships at joint enterprises for the faculty of specialized departments in universities. Systematic qualification practices for students and practical training at production facilities are being introduced. Each university is implementing phased teaching of specialty disciplines in English, and prospective scientific and pedagogical personnel are being sent for internships in developed countries. The system of graduate education is being critically analyzed. An important element of innovation in the educational process is the enhancement of the status of university departments, with increased responsibility for ensuring the quality of education.

4 Results of the Study and Conclusions

The research on the state of higher education and the study of innovative aspects for its further improvement in the new Uzbekistan lead to the following conclusions:

1. Qualification Levels of Staff: It is necessary to note that the qualification level of certain staff members in the higher education system, particularly at the intermediate level and in information resource centers, does not meet the challenges of globalization. These staff members focus solely on executing directives from higher authorities without contributing to innovative processes.

2. Faculty Staffing: University departments are inadequately staffed with faculty members holding advanced degrees, particularly in private universities. This deficiency significantly affects the quality of training for competitive specialists in the socio-economic sectors within the context of a digital economy.

3. Library Resources: Libraries in new higher education institutions, especially private universities, lack sufficient textbooks, modern educational materials, and specialized literature in Russian and English necessary for preparing specialists of a modern level.

4. Language Proficiency: There remains a problem in providing higher education institutions with faculty members proficient in foreign languages. This issue is particularly acute in filling high-qualified positions in specialized departments and public science fields across Uzbekistan.