INCREASING THE COMPETITIVENESS OF THE EDUCATIONAL SERVICES MARKET BY STRENGTHENING THE INTEGRATION OF SCIENCE AND PRODUCTION IN HIGHER EDUCATIONAL INSTITUTIONS IN UZBEKISTAN.

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Abstract

This article is devoted to the issues of increasing the competitiveness of the educational services market by strengthening the integration of science and production in higher educational institutions in Uzbekistan. The importance of scientific and technological development in ensuring economic growth by increasing the efficiency of the education system in the country and improving the quality of higher education is increasing. Therefore, the integration of educational institutions with science and production plays an important role in increasing the competitiveness of the educational services market.

The article analyzes the need for integration between science, education and production, its contribution to increasing the competitiveness of the country's economy and education system. It also examines state policies and initiatives implemented in Uzbekistan to strengthen these integration processes, including measures aimed at effectively linking scientific and educational activities with the production sector and developing innovations.

Keywords: Integration, technology, individual, monographs, non-state higher education.

Introduction:

The integration of the higher education system and the science sector plays an important role in realizing the development prospects of Uzbekistan. Today, changes in the economic, social and technological spheres around the world require highly qualified specialists and innovative approaches. Therefore, the integration of education and science systems with production is of great importance in the formation of a competitive economy, especially in the development of the educational services market.

By combining scientific research and production processes in higher educational institutions, it is possible not only to improve the quality of education, but also to create opportunities for the production of innovative products and services. At the same time, increasing competitiveness in the educational services market, training high-quality personnel and providing various sectors of the economy with modern scientific achievements serve the sustainable development of the country.

This article analyzes the integration processes in the higher education system and science of Uzbekistan, their interaction with production, and their role in increasing the competitiveness of the educational services market. The article presents the current state of integration relations, existing problems and ways to solve them, as well as proposals for the development of effective cooperation between the education system and production.

Literature Review

The issue of strengthening the integration of science and industry in higher education institutions is one of the most relevant topics both globally and in Uzbekistan. This analysis is based on information from various sources and includes the following main areas:

Integration is defined as the process of strengthening interactions and cooperation between several institutions or sectors. Higher education institutions provide opportunities for the creation of new knowledge and innovations by combining scientific research and production processes.

In the framework of the renewal and modernization of the education system in the Republic of Uzbekistan, the issue of integration between science and production in higher education institutions is of great importance. The "Development of Education" programs, which have been implemented since 2017, include a number of initiatives aimed at strengthening this integration. Higher education institutions support innovative development by adapting scientific research to the needs of industry.

In the era of globalization, in contrast to the focus on supporting enterprises that form a single structure in the industrialized era, the main strategic goal of the state in the highly industrialized era has become to increase the international competitiveness of countries and regions through the development of clusters. A.V. Babkina emphasizes: "The cluster structure of the economy shifts the conditions and factors of innovation-oriented economic dynamics to the regional level, increasing their importance in solving development problems." It is shown that the role of the agglomeration factor, which is studied by Ye.I. Lazareva as a field of accumulation of a “critical mass” of human and social capital, scientific and production and innovation potential, which ensures the stability, systemic emergence and competitiveness of clusters, is significantly increasing. In the late 20th and early 21st centuries, in the context of an active search for sources of sustainable innovative evolution, various theories were formed in the field of innovative economics and innovation management. Among these studies, the theory of innovations associated with the names of Y. Schumpeter and E. Hansen is most popular. The search for new (additional) factors of added value growth led to the activation of theoretical research in the field of a resource-based approach to the analysis of sustainable innovation-oriented development of the economy, which contributes to the gradual introduction of human capital into the management system as a fundamental resource of sustainable, innovative dynamics. Scientific approaches from the point of view of human capital give priority to separate, mutually exclusive sources of development, such as technique, technology, and innovative management. In addition, the problems of the innovative orientation of economic development are mainly studied within a specific cycle of reproduction, without paying attention to the future and not showing what will happen in the long term. In the studies of B.Z. Milner, B.N. Kuzik, Yu.V. Yakoves, there is a tendency to expand the interpretation of human capital, leading to the gradual transfer of not only its economic, individual, but also non-economic, social indicators to the strategic management system [10]. In the current conditions, in the transition to an innovation-oriented economy, completely different points of view are emerging on the mechanism for transferring new, modernized structures and functions of human potential into the strategic decision-making system.

Methodology

This article examines the prospects for strengthening the integration of science and industry in higher education institutions. The research methodology includes the following main directions:

The main objective of the study is to strengthen the integration of science and industry in higher education institutions, to identify the benefits and difficulties of such integration.

The study is conducted using the following methods:

- Analysis and synthesis: Analysis of existing literature on the topic and drawing conclusions based on them.
- Sociological surveys: Studying the opinions of students, teachers and specialists in the production sector.
- Interviews: Conducting interviews with scientists and industry representatives in order to delve deeper into the problems and opportunities.
- Analysis of forms of evening and correspondence education: Studying the existing forms of education in higher education and assessing their integration with production.
- Existing links between science and production.
- Necessary conditions for strengthening integration relations.
- Successful integration experiences in other countries.
- Problems arising in the integration process and ways to solve them.

The research results include proposals and recommendations for strengthening the integration of science and industry in higher education institutions. These results are also expected to be useful for the development of the education system.

In the research process, methodological foundations are formed by studying scientific articles, monographs, state statistical data and international experience.

This methodology allows for a comprehensive and in-depth study of strengthening integration relations and provides the necessary basis for the implementation of research results in practice.

Results and analysis

The links between the research activities of higher education institutions and the production sector have significantly strengthened. As of 2023, more than 37% of scientific research conducted in higher education institutions in Uzbekistan is focused on industrial sectors, including light industry, chemistry, energy and information technology. This indicates the existence of a direct connection between science and production. More than 150 research centers of higher education institutions operate, in which an average of more than 2,000 scientific works per year are aimed at improving production and technologies.

Innovative products and technologies produced by higher education institutions play an important role in the formation of a competitive market. For example, in 2022, more than 1,500 patents and utility model certificates were obtained from higher education institutions of Uzbekistan, which is an increase of 15% compared to 2021. Also, the number of startups and innovative projects implemented through the integration of science and production in Uzbekistan is growing by 20-25% annually.

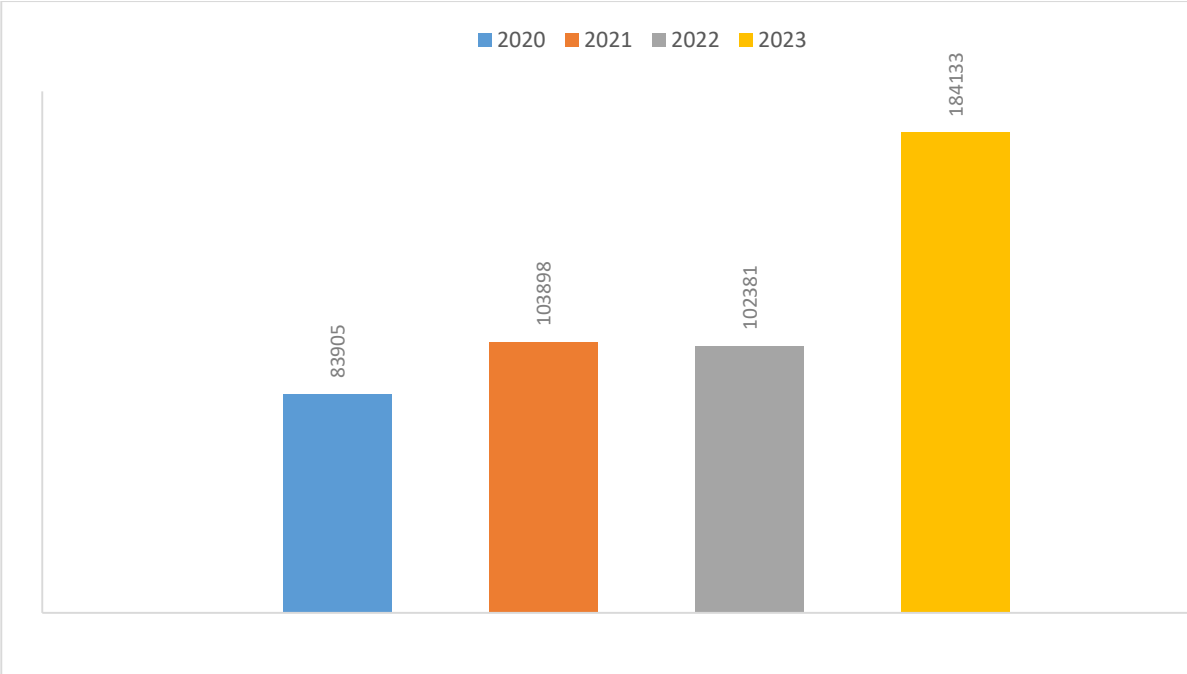

Figure 1. Number of graduates of higher education institutions.

The results of the analysis show that from 2020 to 2021, the number of graduates increased by 19,993. This represents an increase of 23.8%. From 2021 to 2022, the number of graduates decreased by 1,517, which represents a decrease of 1.5%. From 2022 to 2023, the number of graduates increased sharply - by 81,752, which is an increase of 80%.[1]

The increase in the number of graduates is also associated with an increase in the quality of education in higher education institutions. The reforms being implemented in the education system in Uzbekistan, including the renewal of educational programs and the improvement of the personnel training process, are contributing to the increase in the number of graduates.

Changes in the number of graduates also show the impact of different forms of education in higher education. While in the early years, full-time education dominated, in recent years the number of graduates has increased further as a result of the development of evening and part-time forms of education. This allows for flexible education for students and meeting production needs.

The need to increase the number of graduates of higher education institutions has increased in order to ensure the economic development of Uzbekistan and meet the demands of the younger generation. An increase in the number of graduates plays an important role in ensuring social stability, employment, and stimulating economic growth.

This analysis shows the change in the number of graduates of higher education institutions in Uzbekistan. The increase observed during 2020-2023 is associated with an improvement in the quality of education, a diversity of forms of education, and increased socio-economic demands. Changes in Uzbekistan's education system are expected to create a basis for a further increase in the number of graduates in the future.

This study aims to study the number of students in higher education institutions in Uzbekistan by different forms of education for the period 2010-2023. The data reflect changes in the number of students studying in full-time, evening and part-time forms of education.

According to the table, the number of students studying in full-time education increased from 2010 to 2023:

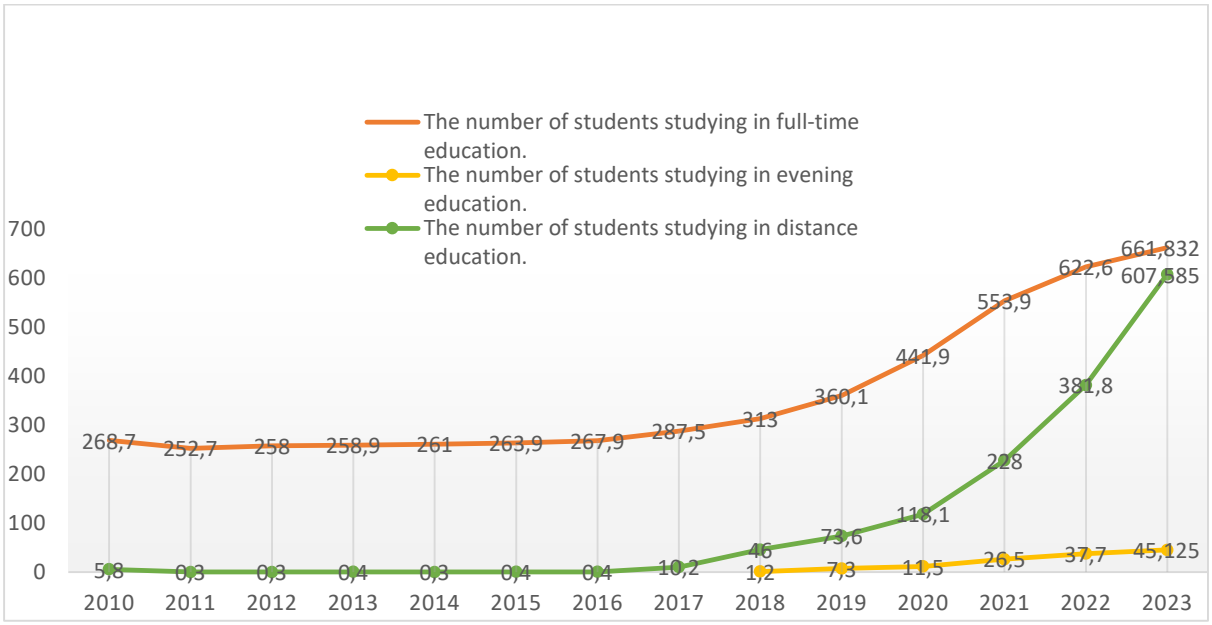

Figure 2. The number of students in higher education institutions in the Republic of Uzbekistan by form of education

This means an increase of 393,132 people in 13 years. This increase is 146.4%. In the form of evening education, the number of students has increased very little from 0 to 45,125 from 2010 to 2023. This indicates an increase in demand for evening education and the need to develop it.

In the form of correspondence education, the number of students has increased from 5.8 to 607,585 in 2010. This is due to the adaptation of correspondence education to practice and the opportunities for students to get a job.[2]

This increase is also associated with an improvement in the quality of education. The reforms implemented by the government of Uzbekistan in the education system, including the renewal of curricula and the improvement of pedagogical skills, are aimed at improving the quality of education for students and ensuring their competitiveness.

The increase in the number of students in full-time education indicates economic growth and an increase in the level of knowledge of society. The development of other forms of education, on the other hand, creates new opportunities for students, which plays an important role in ensuring social stability.

The change in forms of education, the increase in the number of students and the improvement of the quality of education serve as the basis for the further development of the education system of Uzbekistan. In the future, further expansion of education and the introduction of new formats will allow students to familiarize themselves with modern requirements.

This analysis shows the change in various forms of education in higher education institutions in Uzbekistan. The increase in the number of students in full-time, evening and part-time forms of education over the period 2010-2023 is associated with the increase in the number of students in full-time, evening and part-time forms of education, the improvement of the quality of education and the strengthening of socio-economic requirements. These

changes are an important factor for the future development of the education system of Uzbekistan.

This study examines the change in the number of non-state higher education institutions and the number of students in them over the period 2018-2023. The data reflect changes in the number of non-state educational institutions and the creation of new opportunities for students.

Table 3

Number of higher education institutions in the Republic of Uzbekistan.

	2018	2019	2020	2021	2022	2023
Number of non-state higher education institutions (total)	1	4	5	17	42	90
Number of foreign higher education institutions	10	16	18	25	26	31
Number of higher education institutions	98	119	127	154	191	219

The number of non-state higher education institutions increased from 1 to 90 between 2018 and 2023. This represents an increase of 8,900% and indicates the strengthening of the private sector in education in Uzbekistan.

Number of students The number of students studying in non-state higher education institutions has also increased, but is limited to 10 students in 2018 and 31 students in 2023. Although this increase is at least 210%, the level of student attraction and satisfaction in this area needs to be further increased.

Number of higher education institutions The number of higher education institutions in Uzbekistan also increased from 98 to 219 between 2018 and 2023. This is due to the increase in the number of educational institutions, the expansion of educational opportunities in the regions, and the increased demand for modern knowledge.[3]

The increase in the number of non-state higher education institutions is associated with several factors:

State support Reforms in the education system, aimed at attracting the private sector to the education sector, have stimulated the emergence of new non-state educational institutions.

Increased demand for higher education The desire of the younger generation to get an education and changing economic conditions have increased the demand for education.

Diversity of educational programs Non-state higher education institutions offer a variety of educational programs, creating more opportunities for students.

In the near future, the number of non-state higher education institutions is expected to increase and create more opportunities for students. These changes will serve to improve the quality of education, increase the number of students, and contribute to the socio-economic development of society.

This analysis shows the presence of non-state higher education institutions in Uzbekistan and their growth. The growth in the number of non-state educational institutions and the number of students in them from 2018 to 2023 confirms the success of educational reforms. These changes are important for the future development of the education system in Uzbekistan.

Conclusion

Strengthening the integration of science and production in higher education institutions is of great importance for the socio-economic development of Uzbekistan. This integration plays an important role not only in the implementation of scientific research in practice, but also in the training of competitive personnel.

The main conclusions considered in the article are as follows:

1. "Need for Integration" Effective integration between science and production accelerates the processes of development and implementation of innovations. This, in turn, contributes to economic growth.

2. "Practical Experience" It is necessary for higher education institutions in Uzbekistan to conduct joint research in cooperation with the production sector to create new knowledge and technologies. Such cooperation allows students to develop practical experience and skills.

3. "Existing Problems" In the process of strengthening integration, there are problems such as lack of financial resources, shortcomings in the training process, and lack of communication between scientific research and production.

4. "Future Prospects" It is necessary to develop new strategies to strengthen the integration of science and production in higher education institutions. This includes the development of innovation ecosystems, the establishment of joint research centers, and programs to involve students in practice.

These conclusions identify the main areas that will help to effectively implement the integration process in higher education institutions. As a result, it will create an opportunity to increase the competitiveness of the economy of Uzbekistan and ensure knowledge-based economic development.

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