



## **Organizational Mechanism of Interaction of Higher Education Institutions of Belarus and Uzbekistan with Employers**

**Karpovich Viktor<sup>1,\*</sup>, Ponomareva Natallia<sup>1</sup>**

<sup>1</sup>PhD in Economics, Associate Professor, Belarusian National University of Technology, Republic of Belarus

Emails: [karpovich.v@bntu.by](mailto:karpovich.v@bntu.by); [n.ponomareva@bntu.by](mailto:n.ponomareva@bntu.by)

### **Abstract**

Research shows that effective communication between higher education institutions and employers contributes to the development of competent personnel prepared to solve real-world problems in production and business. This issue is highly relevant given rapid changes in the economy and technological processes, requiring the constant adaptation of educational programs and advanced training for graduates. This article examines areas of cooperation between universities in Belarus and Uzbekistan and proposes a model for their interaction with enterprises in the real sector of the economy in the context of the emerging knowledge economy and the trend toward developing education as a key element of scientific, technical, and innovation policy.

**Keywords:** Education; Cooperation; Academic mobility; Program; Competency; Labor market; Mechanism; Interaction

### **1. Introduction**

The development of an education system in any country is of strategic importance. This is primarily because education is one of the largest sectors of the global economy and one of the fastest-growing sectors of global trade in services, largely determining a country's economic development and its global competitiveness. A number of countries that have already created highly effective national higher education systems and, based on them, innovative economies, are undisputed leaders in the export of educational services and innovation, allowing them to reap significant benefits. Education plays a key role in the development of a country's human capital and promotes cultural exchange and interethnic cooperation.

### **2. Methodology and Data Analysis**

The Republic of Belarus, with its rich traditions and significant potential in higher education, is consistently following global advances in this field, developing both the commercialization of educational services and its scientific, intellectual, and innovative sectors.

The Republic of Belarus has traditionally attracted the attention of international students due to its high-quality education, affordable tuition fees, and welcoming environment. The total number of international students and postgraduates in the Republic of Belarus from 2019 to 2023 showed significant fluctuations (Table 1). The maximum number was observed in the 2021/22 academic year (24,338), while the minimum was recorded in the 2023/24 academic year (18,838). This volatility is due to changes in foreign policy, geopolitical risks, and the global health crisis caused by the COVID-19 pandemic.

The analysis showed that China, Uzbekistan, and Turkmenistan are the leading sources of student arrivals in Belarus. The number of Chinese students increased the most rapidly during the analyzed period (up 213% over five years), while students from Uzbekistan showed the largest percentage increase (almost a fivefold increase), despite a recent slowdown.

A fundamental aspect of the strategic development of university education is the recognition that personnel training must go hand in hand with the development of general competencies required by specialists, regardless of their specific professional specialization. Key competencies include:

- Knowledge of the fundamentals of project and team management;
- Ability to work with large volumes of data and process information;
- Proficiency in modern communication and remote collaboration tools;
- Ability to adapt to rapidly changing labor market conditions;
- Creative thinking and a willingness to solve unconventional problems.

**Table 1:** Number of students and postgraduates – foreign citizens studying at higher education institutions of the Republic of Belarus (at the beginning of the academic year; people)

	2019/20	2020/21	2021/22	2022/23	2023/24
Total	19 745	20 936	24 338	20 474	18 838
of which from:					
China	2 112	3 634	8 011	6 492	6 608
Uzbekistan	418	1 045	2 327	2 999	2 434
Turkmenistan	10 056	8 738	6 451	3 462	2 214
Sri Lanka	819	1 016	1 439	1 583	1 828
Russian Federation	1 489	1 517	1 397	1 391	1 492
India	656	734	772	781	825
Lebanon	531	659	545	534	490
Israel	82	115	285	338	318
Nigeria	322	259	284	274	256
Azerbaijan	313	284	266	261	218
Congo, Democratic Republic of	65	156	188	179	181
Tajikistan	425	323	223	222	175
Kazakhstan	231	170	194	171	150
Iran, Islamic Republic of	539	416	313	190	144
Share of foreign citizens in the total number of undergraduate and graduate students, percent	7,2	7,9	9,5	8,6	8,1

Modern trends in the development of the knowledge economy confirm that education today must focus not only on the education and on general development of students and their professional training for the labor market, but also on ensuring that they receive sound research training to actively participate in the creation of new technologies and new products.

Clearly, the traditional approach to specialist training must give way to a comprehensive program for developing a wide range of competencies, beginning early in education and continuing throughout a professional's career. In this regard, in order to train in-demand specialists for the economies of cooperating states, it is advisable to develop a mechanism for interaction between universities and with employers, especially when implementing joint educational programs.

A key area of cooperation is the joint work of universities in the two countries to create a comfortable learning environment, as confirmed by agreements between the Ministry of Education of the Republic of Belarus and the Ministry of Higher and Secondary Education of the Republic of Uzbekistan. Currently, more than 550 treaties and agreements between educational institutions and research organizations in both countries are in effect. In the 2024/2025 academic year, the number of Uzbek citizens studying at Belarusian universities exceeded 4,000, including those studying under joint educational programs (for comparison, in the 2020/2021 academic year, this

figure was 2,327 students). Furthermore, in the 2024/2025 academic year, nine Uzbek citizens were accepted to study in Belarus through the grant program. The most popular universities among Uzbek citizens are the Belarusian National Technical University (2,708 students), Polotsk State University named after Euphrosyne of Polotsk (284 students), Yanka Kupala State University of Grodno (240 students), and the Belarusian State Pedagogical University named after Maxim Tank (218 students). Cooperation between the two countries in education promotes international academic mobility, which broadens the professional horizons of students and faculty, strengthens intercultural ties, and develops internationally qualified personnel [1].

International cooperation in education opens up additional opportunities for the exchange of knowledge and practical experience. Belarus is actively developing such programs, particularly with universities in Uzbekistan, which contribute to improving the quality of specialist training and increasing the competitiveness of graduates internationally [2].

Academic mobility also helps enrich the educational process with new ideas and methods. Students have the opportunity to spend a semester or a year of study at partner universities abroad, providing them with unique experience and improving their career prospects. Such initiatives help develop professionals capable of working in an international environment and solving complex problems arising in the modern economy [3].

One key aspect of this collaboration is the creation of joint educational programs that allow students to gain practical skills directly in the workplace. Currently, 18 Belarusian universities are implementing over 100 joint educational programs with universities in the Republic of Uzbekistan.

Joint educational programs can be implemented using the following models:

1. Joint and dual (or more) degree programs, which involve the coordination of curricula and programs, teaching methods, and student assessment, mutual recognition of learning outcomes at partner universities, the existence of common program management structures, and the issuance of a joint (or separate) diploma;
2. Accredited and validated programs, which involve mutual recognition by the university and other partner universities of the equivalence of their educational programs, with the potential issuance of their own diploma to graduates of the partner university;
3. Franchise programs, which involve one university transferring the right to implement its educational program to another while retaining the right to control the quality of the educational program (e.g., administering examinations and issuing diplomas).

Furthermore, the practice of student internships at large, high-tech enterprises in both countries is being actively implemented. Such activities contribute to the development of practical skills and the adaptation of future specialists to real-world labor market conditions. An important step was the decision to organize internships for university faculty and staff, which allows for the transfer of best teaching methods and the adaptation of curricula to employer requirements.

Another important element of interaction is the development and implementation of new educational documentation that meets modern professional training standards. In particular, the introduction of modern textbooks and teaching aids prepared in Belarus or co-authored by representatives of the two countries into the curriculum of vocational educational institutions in Uzbekistan [4]. These measures are aimed at improving the quality of specialist training and adapting the educational process to the needs of the modern labor market.

Effective interaction between universities and employers requires the existence of ongoing communication channels that ensure a two-way exchange of information and experience. Regular meetings, conferences, and forums are important tools for establishing dialogue between representatives of the academic community and the business community [5; 6]. They help universities obtain up-to-date information on labor market needs and adapt their curricula accordingly.

Thus, at the 1st Forum of Rectors of Higher Education Institutions of the Republic of Belarus and the Republic of Uzbekistan, held in October 2023, 29 cooperation agreements were signed aimed at strengthening interactions between universities in both countries and employers [4]. Such events create conditions for the exchange of experience and the development of joint initiatives that contribute to improving the quality of specialist training.

Furthermore, the practice of holding exhibitions and presentations of educational potential allows universities to promote their services and attract the attention of employers. Delegations from Belarusian universities actively participate in such events in Uzbekistan, demonstrating a high interest in cooperation and attracting talented students. For example, from October 11 to 19, 2024, the "Education and Career" exhibition was held in Tashkent, Republic of Uzbekistan, in which the Belarusian National Technical University (BNTU) actively participated.

### 3. Results and Discussion

One of the key elements in ensuring a high level of training for specialists who meet the demands of the modern labor market is establishing effective feedback between universities and companies. Assessing the effectiveness of educational programs is impossible without regularly monitoring graduate employment. Collecting and analyzing data on graduates' careers helps universities assess the quality of their educational activities and make timely adjustments to their curricula. The introduction of a graduate career trajectory tracking system is becoming increasingly common in both countries.

In the Republic of Belarus, systematic efforts have been established to ensure graduate employment and monitor their employment for two years after graduation. The procedure is governed by the Regulation approved by Resolution No. 821 of the Council of Ministers of the Republic of Belarus dated June 22, 2011 (as amended on May 16, 2014, No. 470). This work includes maintaining personal records of graduates who have started working, determining whether their position matches their specialization, their arrival at their first job, and their actual employment. The Ministry of Education aggregates reports from subordinate organizations, creating a single database reflected in official national statistics (Table 2).

The table presents information on the placement of specialists who received higher education funded by the state for the period from 2019 to 2023. Analysis showed that the largest number of graduates were placed in 2022 (22,200). In 2023, the number decreased to 17,300, which may indicate a reduction in the number of budget-funded places.

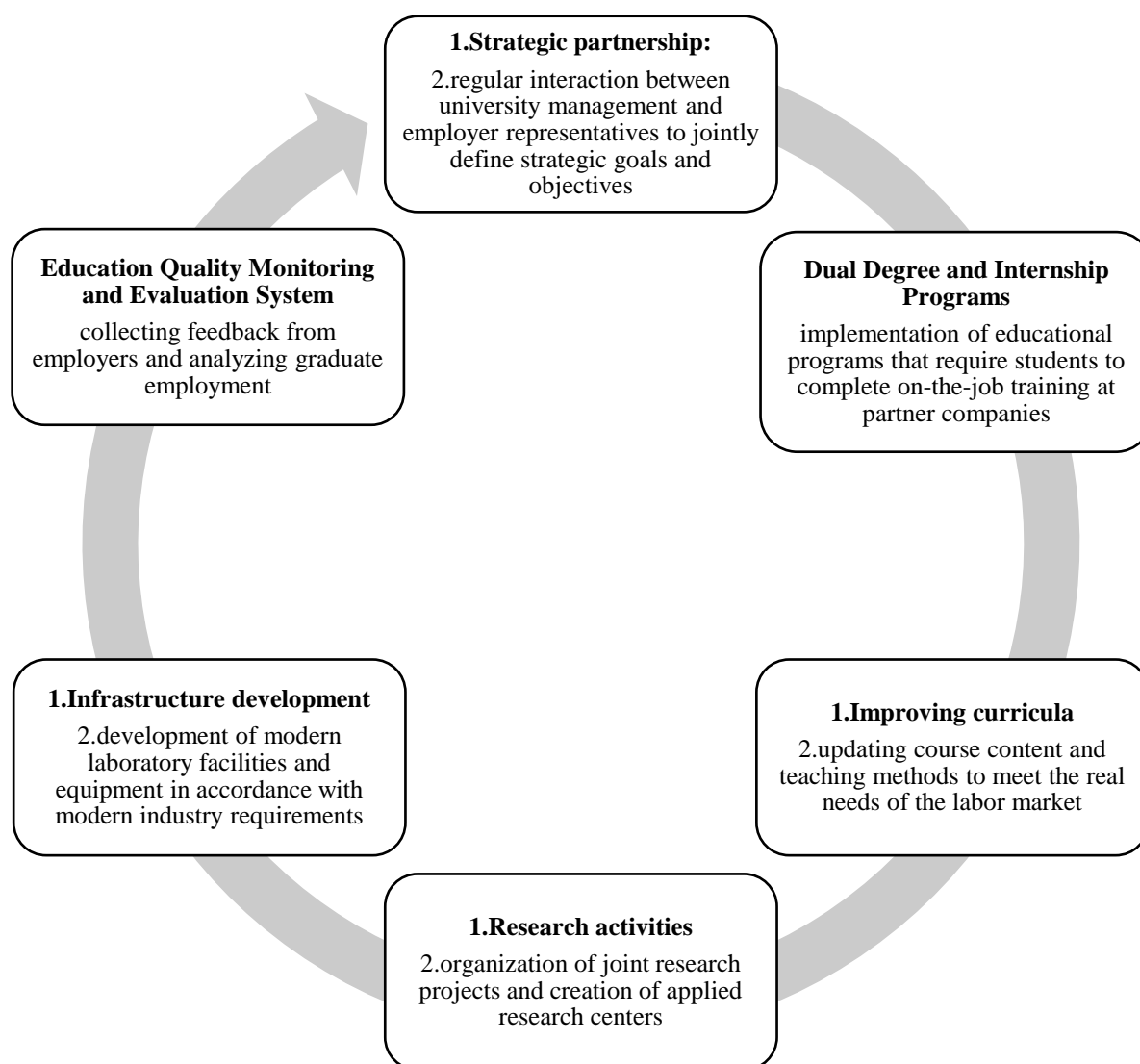
**Table 2:** Placement of Specialists Who Received Higher Education Funded by the State

	2019	2020	2021	2022	2023
Number of graduates eligible for placement and job placement, thousands	19,4	19,3	20,3	22,2	17,3
including:					
received job placement	19,3	19,3	20,3	22,1	17,3
of whom were employed	17,9	18,1	18,9	20,9	16,0
gained the right to independent employment	0,02	0,02	0,03	0,01	0,01
Proportion of individuals who received job placement out of the total number of graduates eligible for placement, percent	99,9	99,9	99,9	99,9	99,9

The number of graduates receiving job placements is virtually identical to the total number of graduates eligible for placement, confirming the high effectiveness of the placement system. Employment rates remain stable, but a significant decline in the number of employed specialists (16,000 people) was observed in 2023, due to a reduction in the number of state-funded places. The share of specialists eligible for independent employment is extremely low, less than 0.1% of the total number of graduates. Almost all graduates receive job placements, demonstrating the high effectiveness of the placement system. The share of employed specialists among those who received job placements in 2023 was approximately 92.5%. Thus, it can be concluded that the placement system in Belarus is functioning effectively, providing almost all graduates studying at the expense of the national budget with job placements.

Uzbekistan is also implementing measures to systematically record graduate employment data. A dedicated database has been created to track graduates' careers, enabling comparative analysis and informed decisions on modernizing educational programs. This ensures transparent and objective evaluation of program effectiveness, enhancing their quality and attractiveness for both students and employers.

The modern economy places high demands on the quality of professional education, necessitating regular updating of educational standards and their adaptation to the needs of the labor market. Establishing constructive interaction between universities and businesses is becoming a crucial task, which entails creating an organizational mechanism for such interaction. This model should ensure high-quality alignment between student training processes and employer needs, increasing the attractiveness of graduates in the labor market. Our proposed model includes six key components covering all aspects of interaction between educational institutions and the real sector of the economy (Figure 1).



**Figure 1.** Organizational Mechanism for Interaction between Educational Institutions and the Real Economy

The practical implementation of the developed model is organized in stages, involving the consistent implementation of a number of steps:

- clearly formulating goals and objectives aimed at establishing effective relationships with partner organizations;
- legally soundly formalizing agreements regulating partnerships with specialized commercial entities;
- reviewing and modernizing existing educational programs, integrating best practices and the latest advances in science and technology;
- organizing systematic professional development for faculty through specialized seminars, trainings, and other supplementary education formats;
- continuous quality control of the educational process using mechanisms for promptly adjusting the strategy, taking into account the objective demands of the modern labor market and socioeconomic realities.

#### 4. Conclusion

Thus, the conducted study allows us to conclude that the interaction between higher education institutions in Belarus and Uzbekistan and employers is characterized by a high degree of activity and a focus on continuous improvement. The key success factors include regular feedback between universities and companies, adapting

educational programs to current labor market demands, actively using internships and practical training, and developing international cooperation and academic mobility.

Further recommendations for developing cooperation include strengthening the role of sector councils, involving employers in the design of educational programs, expanding the number of internships and practical training opportunities, and actively using digital platforms to collect and analyze graduate employment data. Improving the organizational mechanisms for interaction between universities and employers will form the basis for training competitive specialists capable of functioning effectively in the global economy.

**Funding:** “The study was carried out with the financial support of the BRFFI (BRFFI-MIRRU-2023: agreement dated 20.11.2023, No. G23UZB-110)”

**Conflicts of Interest:** “The authors declare no conflict of interest.”

## References

- Ministry of Education of the Republic of Belarus. (2025, September 11). *The second forum of regions of Belarus and Uzbekistan*. <http://edu.gov.by/news/vtoroy-forum-regionov-belarusi-i-uzbekistana-bolshie-perspektivy-dlya-sotrudnichestva>
- Embassy of the Republic of Belarus in the Republic of Uzbekistan. (2025, September 11). *Professional education forum*. [https://uzbekistan.mfa.gov.by/ru/bilateral\\_relations/humanitar/educ](https://uzbekistan.mfa.gov.by/ru/bilateral_relations/humanitar/educ)
- Belarusian National Technical University, Faculty of Marketing and Entrepreneurship Management. (2025, October 3). *N. P. Ponomareva took part in a report at an international conference held in Uzbekistan*. <https://fmmp.bntu.by/novosti/tpost/rggj3lt9p1-ponomaryova-np-prinyala-uchastie-s-dokla>
- Belarusian National Technical University, Faculty of Marketing and Management of Entrepreneurship. (2025, October 2). *Students of the Faculty of Marketing and Management of Entrepreneurship completed training at the Tashkent State University of Economics*. <https://fmmp.bntu.by/novosti/tpost/jcjrss5fy1-studenti-fmmp-proshli-obuchenie-v-tashke>
- Republic of Belarus. (2024). *Education Code of the Republic of Belarus* (Law No. 243-Z of January 13, 2011, as amended by Law No. 46-Z of December 5, 2024). National Legal Internet Portal of the Republic of Belarus. <https://pravo.by/document/?guid=3871&p0=hk1100243>
- Belarusian National Technical University. (2025, October 1). *Belarusian–Uzbek cooperation in higher education is constantly expanding its borders*. <https://bntu.by/be/news/17574-belorussko-uzbekskoe-sotrudnichestvo-v-oblasti-vysshego-obrazovaniya-postoyanno-rasshiryayet-svoe-granicy>
- Belarusian National Technical University. (2025, October 11). *The first graduates of joint educational programs with Uzbek partner universities*. <https://bntu.by/be/news/11242-pervye>