

**ОБРАЗОВАНИЕ И ОБУЧЕНИЕ: МЕТОДОЛОГИЯ, ТЕОРИЯ, ТЕХНОЛОГИЯ  
БІЛІМ БЕРУ ЖӘНЕ ОҚЫТУ: ӘДІСТЕМЕ, ТЕОРИЯ, ТЕХНОЛОГИЯ  
EDUCATION AND TRAINING: METHODOLOGY, THEORY, TECHNOLOGY**

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**RESEARCH AND ANALYSIS OF INTERNATIONAL  
MODELS FOR HIGHER EDUCATION AND BUSINESS COOPERATION**

**Abstract**

Educational services are a commodity that benefits primarily those who consume it (individuals and the state). In the context of this topic such aspects as the quality of the workforce, a high level of income, high wages for workers and sustained economic growth are very important. All this defines the investment nature of educational services. Consequently, education in the context of its interaction with business can be understood as a social institution, which trains a skilled workforce in accordance with market requirements, the state of culture, changes in science and technology, as well as oriented towards the dynamic development of society and the growth of competitiveness of national (regional) economy. The ongoing reforms in higher education still leave many problems and challenges unresolved. The State Programme of Education and Science Development for 2020–2025 implemented in Kazakhstan requires a new level of relations between educational institutions, business, and society. Undoubtedly, business understands both the challenges and difficulties of higher education and in general is ready to participate in such processes as development of professional standards, formation of the content of educational programmes, monitoring of labour market needs in development of innovative education. However, new effective models and mechanisms of interaction between HEIs and business, based on a systematic approach including economic, managerial and legal aspects, are needed. The aim of the study is to develop theoretical, practical, methodological recommendations for improving the models of interaction between universities and business structures, which will allow the implementation of high quality innovative education.

**Key words:** educational services, international models, education, business, investment nature, labor market, innovation.

**Introduction**

The higher education system, in the context of its interaction with society and business, presents education as an area whose outcomes are only seen in perspective, and the effect on individuals and society are difficult to quantify. It should be kept in mind that educational services are a commodity that primarily benefits those who consume it (individuals and the state), but indirectly through the quality of the workforce, high income levels, high wages for employees and sustainable economic growth. All this defines the investment nature of educational services. Consequently, education in the context of

its interaction with business can be understood as a social institution, which trains a skilled workforce in accordance with market requirements, the state of culture, changes in science and technology, as well as oriented towards the dynamic development of society and growth of competitiveness of the national (regional) economy.

The ongoing reforms in higher education at the present stage still leave many problems and challenges unresolved. The main reasons for this situation can be seen as:

- ◆ the lack of a clearly defined field of cooperation with society during the reform of the education system, which clearly affects the interests of a significant part of citizens;
- ◆ lack of a clear alignment of the processes of modernising the content of education with the implementation of economic, organisational reforms, the development of the legal framework and the provision of new mechanisms;
- ◆ weak linkage of higher education adaptation processes with the real economy and business.

The State Programme of Education and Science Development for 2020–2025 implemented in Kazakhstan requires a new level of relations between educational institutions, business, and society. Undoubtedly, business understands both the challenges and difficulties of higher education and in general is ready to participate in such processes as development of professional standards, formation of the content of educational programmes, monitoring of labour market needs in the development of innovative education. However, new effective models and mechanisms of interaction between HEIs and business, based on a systematic approach including economic, managerial and legal aspects, are needed.

The authors share the Russian researchers' views on the collaboration between the higher education system and the business community, which should be developed in the following directions:

- ◆ formation of professional standards with the participation of the business community;
- ◆ business involvement in the ranking of educational institutions, based on determining whether the quality of training corresponds to labour market needs in order to obtain reliable information on the competitiveness of the university and its graduates;
- ◆ establishment of corporate training and retraining centres for employees based on the vocational education system [1].

In this regard, the purpose of the study is to develop theoretical, practical, methodological recommendations to improve the models of interaction between higher education institutions and business structures, which will allow the implementation of innovative education of high quality.

## **Materials and methods**

The authors used scientific works and publications on the study of foreign experience of interaction between the sphere of education and business, analytical information on the topic of research, and expert information on the effectiveness of existing models of building stakeholder partnerships as their main materials.

This study employs a comparative analysis approach to examine and evaluate international models for higher education and business cooperation. Next, a diverse range of international models implemented in different countries or regions are selected. Factors considered during the selection process include the scope of collaboration, nature of partnerships, governance structures, etc. The research relies on various materials, including academic literature such as journals, research reports, and books, as well as online resources and relevant analysis. A comparative analysis used evaluates the level of industry engagement, research collaboration, entrepreneurship support, and impact on students' employability.

By conducting this research and analysis of international models for higher education and business cooperation, the study aims to provide a comprehensive understanding of successful practices, challenges, and opportunities for collaboration. The findings will contribute to the development of effective strategies and policies that enhance partnerships between higher education institutions and businesses on a global scale.

The key research methods include systemic, comparative and factor analysis methods. The authors have meticulously studied the models under study, identified their strengths and weaknesses, and identified the main directions for building a domestic innovative model of partnership between education and the business community.

## Literature review

Growing international competition and dynamic technological change are prompting active encouragement of university-business collaboration. Such collaboration, as a means of enhancing the effectiveness of innovation, ensures the rapid and successful transfer of research results to business, contributing to economic growth and prosperity. The opportunities for such interaction are vast.

Researchers present various typologies of relationship building for effective interaction. However, creating a typology that reflects all possible areas of university-business interaction is a difficult task. One option is a simple classification, based on formal features. That is, the interaction between universities and business is carried out through various formal and informal channels. [2, 3]. We can consider 10 channels that are important for the interaction between universities and the business community (Table 1).

Table 1 – Channels of interaction between universities and business

Formal channels – suppose involvement of formal agreements, contracts and other forms of commitment between the university and the business.	Informal
Joint research – research projects carried out by universities, partly or fully funded by business. Projects can be carried out through contractual services and academic consultancy, where business commissions universities to carry out research. Research services are set up to solve a specific business problem or to create new knowledge in accordance with business specifications and are of a practical nature.	Scientific publications in academic journals and other specialist media. Science-intensive businesses strongly complement basic academic research and the R&D of their companies can usually make use of research publications [4].
Intellectual property (IP) transactions – the licensing and sale of IP. For example, patents and licences (created by universities) are licensed and sold to businesses.	Conferences and networking – can be conducted as a formal events or as a dissemination events, but also in more informal settings, such as meeting and contacting alumni or colleagues [4].
Research mobility – permanent, and temporary teams of university researchers working in business and vice versa. I.e., channels and links – “knowledge brokers” or “bridging the boundaries” between university and business, as they well understand both university and business. [5], [6]	Geographical proximity – promotes networking and informal interaction between university and business researchers. Science parks close to universities, firm laboratories on university campuses or on university premises. Collaborative research often takes place locally as well as in nearby regions, highlighting the importance of having research institutes in close geographical proximity to business structures as well as the importance of the university to the economic growth of the regions.
A university spin-off company is a company set up by scientists (or alumni) to develop and commercialise knowledge (research results).	Equipment sharing refers to universities and their business partners sharing specific infrastructure: laboratories and equipment. As a rule, it is often expensive to establish a laboratory. Consequently, universities often have laboratories that can be used both for teaching students and for conducting research for business.
Workforce mobility – getting university graduates into business jobs Russian authors [7] argue that students are the most important form of knowledge transfer into business.	Joint training includes courses and continuing education provided by universities to companies, as well as guest lectures and master classes run by businesses at the university. Training is also linked to workforce mobility, and there is also an opportunity for companies to interact with students during their training.
Note: Compiled by the authors.	

Summarising the information presented in the table, we can see the position of Russian and other foreign authors who believe that due to the interaction between HEIs and businesses, universities can:

- ♦ increase the relevance of their research to business needs;
- ♦ contribute to the attraction of relevant expertise and knowledge into business technology resources;
- ♦ generate new opportunities for innovation through research.

Partners tend to depend on the other side and interact with each other to obtain the necessary resources and generate synergies.

An analysis of the perceived importance of “university-business” interaction channels conducted among German academics by Meyer-Kramer and Schmoch [8] showed that for business, formal interaction with universities is more important than publications and patents.

The great importance for business of formal interactions with higher education institutions is also emphasised by Monjon and Waelbroeck [9].

De Fuentes and Dutrenit [10, 11] in their research surveyed R&D and product development executives and academic researchers in Mexico and found that all channels of interaction, both formal and informal, benefit business. They also found that channels related to collaborative and contract R&D work, intellectual property and human resource mobility (graduates and scientists) have the greatest impact on long-term business benefits. As for the impact of patents and licenses, Cohen W.M. found them to be highly useful for technology transfer in knowledge-intensive business areas such as biotechnology, pharma. And according to D’Este and Patel [12] who carried out a large-scale survey of British academic researchers, it is the university researchers who interact most with business through channels such as consultancy and contract research, collaborative research and teaching, and to a lesser extent through the channel of patents.

In general, research on university-business interactions, which is widely reviewed in the literature, is mostly based on formal interactions through channels such as contract research, collaborative research or patent deals. These formal channels can be effective in creating and consolidating an internal knowledge base for business. However, the role of informal channels of interaction between education and business is also important. Informal channels have a great impact on the innovative performance of businesses. In this regard.

Universities should carefully establish channels of communication, taking into account specific business requirements and the university’s capabilities.

Research shows that in some countries, business and universities operate as two separate entities without any relationship. In this case, informal channels can create an initial trusting approach between business and the university. Through understanding, a formal relationship will gradually be established. That is, informal links are fundamental steps to the success and benefits of formal interactions. Formal and informal interactions need to be used together to enhance the efficiency of innovation.

### **Main provisions**

The study of the problem of higher education system and business collaboration is based on the study of existing international experience. Looking deeper into the problem, the conceptual framework describing the collaboration between HEIs and business is the Triple Helix proposed by Henry Etzkowitz and Loet Leydesdorff in 1995. The model represents the cross sections between the three spirals: government, university and business, in the context of generating new knowledge and stimulating innovation. The triple helix model has undergone an evolution in which the following variations can be traced.

The first option is the Statist model: the government plays a key role in planning, stimulating scientific and business processes. Positive sides: business is seen as a driver of the economy, universities play the role of centres of education and research. Negatives: the model limits the ability to initiate and develop innovative transformations of the economy.

The second option is the feedback model (Laissez-faire model): limited government intervention in the economy, with businesses developing as the driving force and universities and the state as supporting structures. The positive side is that businesses develop without excessive state intervention, the negative side is that there is not the necessary interaction with the state and the university for effective innovation.

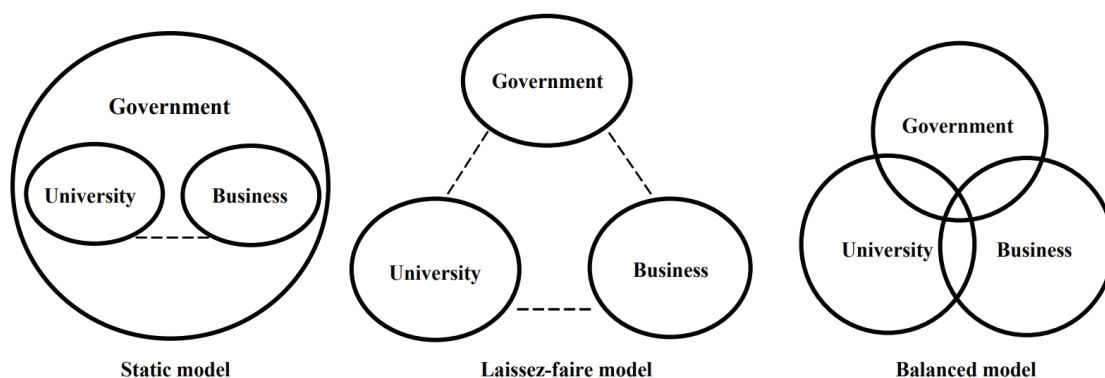


Figure 1 – Evolution of the Triple Helix model

Note: Compiled by the authors based on the source [2].

The third option is the Balanced triple helix model: in a knowledge-based development process, the university becomes a key driver of the development model and takes part in regulating the economy simultaneously with government and business.

Interaction between higher education and business appears to be an important area for modernising higher education and making it more innovative. According to experts, it can be carried out through the conclusion of agreements on the implementation of joint educational programmes and research, R&D commercialisation, technology transfer, etc.

As an example, there are many models of collaboration between universities and business in Russian practice. Each university develops its own version reflecting the specifics of the interaction. One can cite such universities as: Lomonosov Moscow State University; Saint Petersburg State University; National Research University “Higher School of Economics”; ITMO University; Bauman Moscow State Technical University; National Research Nuclear University MEPhI, etc.

Of interest is the model developed by scientists at National Research Tomsk Polytechnic University (TPU) for universities in the Tomsk region, shown in the figure. The university is among the ten largest universities in Russia (Figure 2).

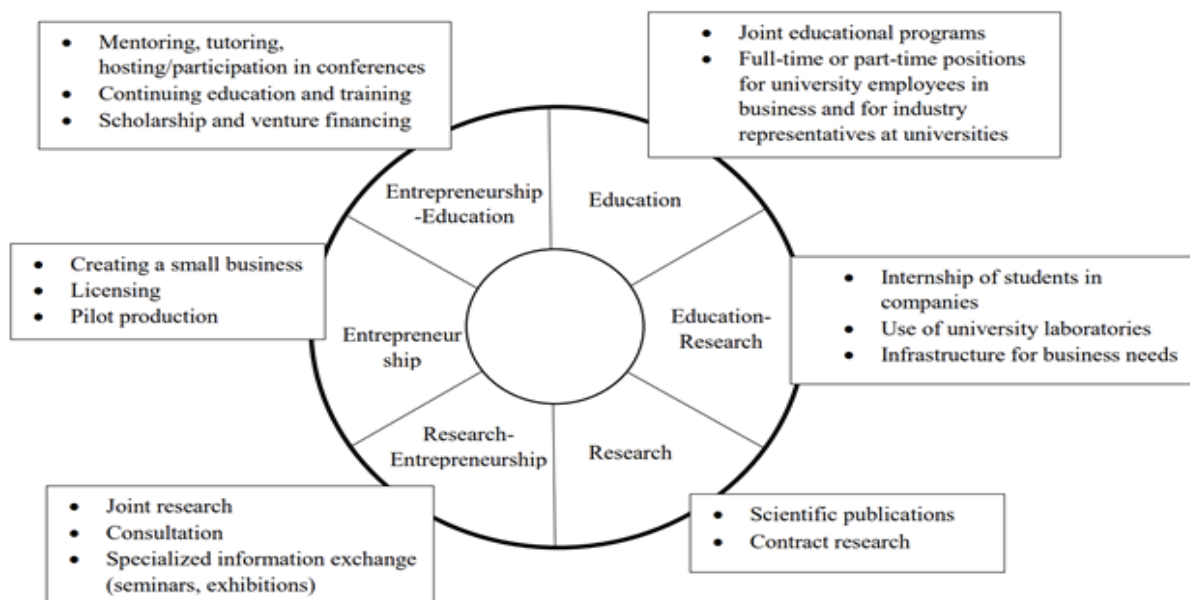


Figure 2 – Model for university-business interaction TPU

Note: Compiled by the authors based on the source [14].

Supporting the interaction of university innovation ecosystems with business is positioned by Tomsk University as a long-term development strategy [13].



The investigated model reflects the three main areas of the entrepreneurial university: education, research, entrepreneurship, and the areas of interaction between these areas:

- ♦ entrepreneurship – education;
- ♦ education – research;
- ♦ research – entrepreneurship.

The model is flexible, as it aims to streamline the main areas of interaction between universities and businesses. The model allows for any modifications suitable for the research tasks of any particular university in any innovation system specific to a particular region and the country as a whole.

Tomsk Polytechnic University interacts with business in the traditional framework of cooperation. This approach to interaction contributes to the formation of rational human resources. The business community is actively involved in the educational process of undergraduate students, as it considers it as a prospect for the selection of graduates. In parallel, companies actively participate in the educational process through the development of professional training. That is to say, traditional cooperation is characterised by a transparent exchange of information and human resources, as both students and university (or business) staff are involved in the interaction process. A common channel of interaction between Tomsk Polytechnic University and business is contractual obligation.

However, the model under consideration does not sufficiently reflect such important areas and features of interaction of universities with business structures as processes of management of common company resources, which influence decision-making on funding of research, development and educational programmes. Also, the model does not clearly reflect the factors that influence the interaction process, which facilitates universities and businesses in identifying potential partners.

The strength of this model is the possibility to separate the interaction activities of the partners according to the innovation function of the individual university in order to create a clear governance and to avoid duplication.

The experience of Southeast Asian countries can be considered equally interesting. The authors considered the experience of interaction between higher education and business in Malaysia. For example, the University Kebangsaan Malaysia (UKM), ranked by the Ministry of Education among the top five research universities in the country, specialises in education, consulting and health care management. The university focuses on networking with businesses to facilitate the commercialisation of university research, and provides the basic infrastructure to attract businesses to conduct research at UKM. Thus, in order to commercialise research products and to promote research with business, the university has established the UKM-MTDC Intellectual Technology Centre. Cooperation between university and business can take various forms, but at UKM this process proceeds as follows (Figure 3).

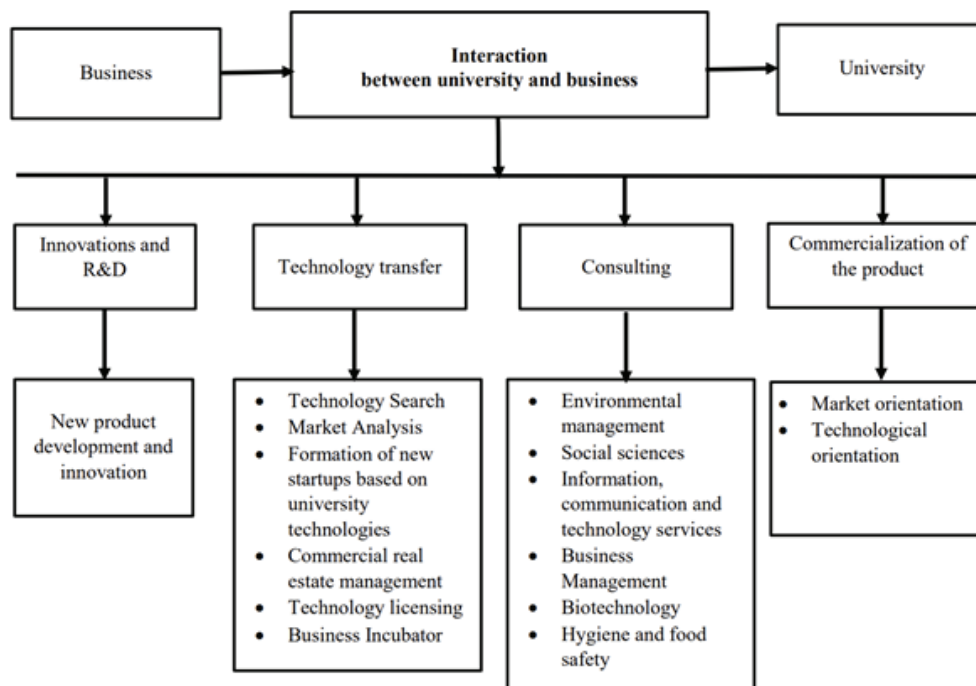


Figure 3 – A model for university-business interaction in Malaysia

Note: Compiled by the authors based on the source [14].

The model is based on 4 key areas of cooperation, namely innovation and R&D, technology transfer, consulting and commercialisation.

The potential of the model is that it details the objectives based on the academic characteristics and capabilities of the university.

In studying the European experience of interaction between education and business, the authors have identified both positive and problematic aspects. The following can be stated as problems, in particular, using the example of Great Britain [15].

1) The human factor – not all academics and teachers can “keep up” with business. That is, teachers and researchers do not want to meet the requirements of business, do not consider it necessary to have entrepreneurial skills, and are convinced that a university is a research and educational institution and the concept of a “research university” is closer to them than an “entrepreneurial” one.

This approach is true for many teachers and academics, both Russian and Kazakh, for example. This is where the belief in state funding and unwillingness to earn financial resources on one’s own works.

In order to solve this problem, firstly, it is necessary to change the mindset and realise that scientific research, the produced specialist are market goods, the subject of innovative and entrepreneurial activity; secondly, to recognise that the educational services market needs a qualitatively new educational service, which meets the modern requirements of the labour market and is provided with innovative educational technologies, which involves in-demand competences.

2) Time frame – the timing of specialist training and research does not coincide with the dynamics of production processes (specialist training – 4–6 years, scientific research within a dissertation – 3 years). Often these timescales become too long to produce results in the real sector or in business. Nevertheless, in Kazakhstan, despite the compliance of specialist training in the framework of joining the Bologna Process with the general European ones, graduates already work in their 3–4th year in the acquired specialty, which allows companies to obtain a specialist in a shorter period and with a certain work experience by the end of their studies. This is also beneficial for the future specialist as it allows him/her to gain work experience already during his/her studies.

In the field of developmental research, the authors agree with Russian scientists who point out the need to follow the path of selecting and applying various forms of scientific activity and incentives for young scientists to accelerate the research process.

3) Speed of decision-making. Universities are inherently conservative and bureaucratic. This is a well-known fact. But in order to develop mutually beneficial and trustworthy collaborations, they need to change their ‘risk avoidance’ policy and develop expertise in taking risks, including commercial ones, for themselves. Of course, this is difficult to achieve, in an environment based on the principles of academia and reliance on state funding.

Russia and Kazakhstan are no exception to the rule. A number of documents that need to be drawn up in order to conclude an agreement between a university and a company go through several approval structures, which takes quite a long time.

4) Organisational structure. HEIs, being unwilling and unable to be entrepreneurial and innovative, close in on themselves, insufficiently use marketing, advertising technologies, which allow to make themselves known in the market of educational services and research developments. It is necessary to learn how to carry out marketing activities, relying on new forms, taking into account the specifics of educational institutions.

5) Missions and objectives. Even the mission and objectives become a “stumbling block” between business and higher education, as, for example, the university’s desire to publish research results may threaten the company’s policy of protecting its commercial interests. In addition, the purpose of higher education system activities is more social than economic and a shift in management paradigm is required to recognise the fact that achieving social goals can be the result of economic development.

Development and implementation of innovations and new technologies based on the results of SRW and R&D will entail economic development, growth of competitiveness of the region, the country as a whole, which will lead to the realization of social goals of educational activities. The imperative of the latter should be the achievement of economic development, which will entail social development.

6) Management. The role of HEI's management, its support or rejection of entrepreneurship, its clear policy on partnership with business and effective management of decision-making process in concluding contracts with businesses in the business community is one of the key factors in developing the system of interaction between higher education and businesses.

7) Networks. The UK experience of linking directly with private companies, bypassing existing networks and network organizations (such as chambers of commerce, associations, various agencies, etc.), is illustrative.

The situation in Kazakhstan is not clear-cut. A number of traditional higher education institutions, which have retained their links with firms and enterprises since the time of the planned economy, continue to support them without the aim of creating new collaborations. However, the agenda is dominated by progressive educational institutions which are establishing new links, in which case cooperation with the chamber of commerce and industry, with the union of entrepreneurs and employers and with associations of small and medium-sized businesses is quite effective.

8) Internal culture and incentive structure. The specific nature of the internal culture of universities may create some obstacles in case teaching and research is a priority. This is reinforced by a system of external incentives (financial and other) for staff aimed only at teaching and research work. This practice clearly demonstrates the dominance of state management of higher education and the relevant legislation, as well as the aversion to entrepreneurial activities of the HEI by its administration.

9) Business strategies. Modern HEIs need a well-defined business strategy with outlined priorities for the types of businesses that should be assisted and supported. This is relevant if the higher educational institution wants to use its resources as efficiently as possible. Also, HEIs' strategy can be built according to specific requests of partner companies, existing groups of companies or market niches not covered by other educational institutions.

In Kazakhstan, HEIs design development strategies, but this is often an inappropriate element of management for this type of organisation – which requires justification, development and application of new management methods.

10) Intellectual property. The importance of the issue is that all teaching and research activities fall under the concept of “intellectual property”, which can certainly be used for commercial purposes.

## Results and discussion

The situation in Kazakhstan's educational institutions shows that most technical universities have a well-developed system of patenting and registering developments and software, but humanities universities are lagging behind in this respect. It is necessary to improve the legislation in the field of intellectual property.

Strategic issues need to be addressed, as UK practice shows, through the implementation of practical objectives, namely:

- ♦ through increased professionalism in the interaction between business and education. Here it is important to understand that the topic is multifaceted and covers many practical issues: a user-friendly university website designed in accordance with the needs of the business community whose representatives approach it; the quality of responses to initial enquiries; the extent to which the university is active in finding new consumers of the services provided. For Kazakhstan, this problem is still quite relevant;

- ♦ through the creation of databases (centralised database), which should be accessible from anywhere in the university: e.g. academic affairs department, business partner department, faculty dean's offices. It is important to organize a clear system of registration of business contacts and to develop a system of client base management, which will significantly expand the sphere of interaction and development of relations with potential clients. An almost insoluble problem is the lack of complete automation of HEIs. Automated HEI systems are mostly fragmented and do not cover all structures and activities of HEIs.

- ♦ through centralised coordination at the policy development level of the HEI to provide complete and consistent responses to customer enquiries and to create and maintain a positive image of the HEI as a reliable and responsible business partner.



In the UK, the problem is posed somewhat lopsidedly, as they see the HEI only as a business partner.

Kazakhstani higher education institutions view business not only from the entrepreneurial side, but also from the social and educational side, i.e. for higher education institutions companies are interested not only as consumers of the results of research and innovation activities, but also as partners in training qualified in-demand specialists.

The research shows that the global trend of stakeholder engagement models is a balanced Triple Helix model. This is exacerbated by the fact that the most favourable conditions for innovation are created at the intersection of these three institutional spheres. Today, an increasing number of universities are forming a more complex innovation ecosystem, including technology transfer offices, incubators, science parks, conducting applied research and entrepreneurship education. In this context, the model of strategic partnership between education and business should reflect interaction in different areas of university activities, as well as with previous levels of education.

In the authors' view, the formation of a Kazakhstani model of interaction between higher education and the business community should be implemented:

- ♦ through staff development to acquire the competences needed for university staff: academic staff, administrative staff, top managers. Professional development of university staff is an acute problem in Kazakhstan, as expenditure for this purpose is insufficiently financed and often teachers undergo professional development within their own HEI, which is ineffective and does not lead to high results.

- ♦ by identifying groups of companies or sectors (rather than individual business units) with which successful cooperation, development of networks and network organizations are possible. Obviously, if the HEI does not have a clearly formulated business strategy and specific lines of action aimed at organising effective partnerships with the business community, it is very difficult to solve such a task. But even if all these measures are taken, they will not make any difference if the university's work does not initially meet the real needs of business. The success of an effective collaboration starts with the perception that the university's activities are adequate to the needs of business.

A study of the UK experience by Russian authors shows that a feature of Aston University's organisation and business networking is the active encouragement of staff who carry out research and consultancy for businesses and organisations and are involved in organising links with the business community [16].

In established practice, all curricula should reflect the existing relationship with business, including the research and consultancy provided by lecturers. The university provides additional and vocational retraining and professional development courses for employees of companies with work experience, which are fully relied on the practical experience of the trainees for whom they are intended. Corporate and prospective clients are apprised of the efforts made by the university to meet their needs.

According to M. Gibson, A. Yu Afonin, the contribution of higher education to the development of the regional business community includes 3 key positions:

1. Business development – as an adaptation of the university's core activities, teaching and research work to the needs of business development through joint research, commercialisation of SRW and R&D results, establishment of research centres and technology parks. Collaboration, clustering, creation of business incubators, partnerships in knowledge transfer can be expected as an outcome.

2. Skills and Employment – as a continuous professional development of university graduates contributing to the economic development of the region.

3. Renovation: material, technical and cultural – as investment in the physical renovation of buildings and facilities, supporting certain types of production [15].

The interaction model can be applied either by individual universities and individual companies working in bilateral partnerships or as a network, thus achieving synergy effect.

Of course, HEIs may not participate in the process of building effective interaction with business due to high time costs, but it should be realised that they then risk losing funding opportunities, receiving it in a more limited amount, losing their relevance for the business community, reducing the employability of their graduates, losing influence on the regional socio-economic situation and reducing the probability of their participation in international cooperation.

Thus, the reluctance of universities to participate in the system of forming a system of interaction with business has led to the development of corporate universities, which are separate from the sphere of traditional higher education. This trend is most clearly seen in the US, Western Europe and Russia. According to experts, the reason for the creation of such educational and research structures is the insufficient level of traditional educational institutions to provide quality educational and innovative services, as they do not have sufficient level and depth of understanding of business needs. Therefore, companies do not try to turn to traditional educational institutions and facilitate the chain of knowledge and skills transfer, making it to their needs at the lowest cost. This, in turn, creates quite a few potential competitors, which can attract the core activities of higher education institutions as well. The most advanced corporate universities do not limit themselves to specific training for employees of their companies, but provide training services on undergraduate and graduate programmes, in some cases jointly with traditional universities. Thus, by shaping the system of interaction independently, business is shifting its focus in its own direction, which is a negative and threatening factor for the higher education system.

### **Conclusion**

The considered models allow building processes of interaction between educational institutions and business structures in different areas of activity. Nevertheless, as practice shows, none of the models has been able to achieve holistic interaction corresponding to a balanced Triple Helix model. Some researchers consider the sphere of management as a necessary and new area of university-business interaction. That is, interaction in management provides opportunities for improving regional governance and organisational management, sharing infrastructure facilities: premises, equipment and other resources, which seems to be more effective.

The authors believe that in this situation it is necessary to focus on the development of an effective mechanism involving the organisation and implementation of a system of interaction between higher education and business in various areas, namely through educational programmes, investment projects, graduate employment programmes, information and consultancy projects.

In fact, effective collaboration between key stakeholders in the education market is an integral part of the innovation management process. Consequently, important decisions related to financial, managerial, organisational, socio-economic aspects are necessary in determining the factors that influence the results and success of university innovation activities.

In shaping and implementing an optimal model of interaction between education and business, the following results should be emphasised:

1. In the area of legal and regulatory provision:
  - ◆ ensure accessibility, transparency, taking into account the best national traditions of education;
  - ◆ to improve the legal and regulatory framework governing the development of partnerships between the education system and businesses.
2. In the field of resources:
  - ◆ to develop a common information (digital) space of educational outcomes and business demands;
  - ◆ to qualitatively advance the infrastructure capacities of higher education institutions and improve the material, technical and information and communication equipment of educational institutions;
  - ◆ create conditions for the profiling and securing the contingent of applicants and students for particular companies.
3. In the area of quality assurance and educational continuity:
  - ◆ training in accordance with the order of the business environment;
  - ◆ building the learning process on the principles of duality, securing internship and traineeship bases for both students and teachers;
  - ◆ jointly identifying the prospects for developing partnerships to provide businesses and the real economy with qualified human resources;
  - ◆ development of a mechanism for cooperation between education and business to form a new model of corporate governance based on social responsibility of business, government and education;
  - ◆ establishment of a certification system and introduction of methods for independent evaluation of the quality of vocational training and qualifications with the participation of the business community.

The achievement of these results is possible with the involvement of business structures at various territorial levels and the higher professional education system.

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## **ЖОҒАРЫ БІЛІМ МЕН БИЗНЕСТІҢ ӨЗАРА ӘРЕКЕТТЕСУІНІҢ ХАЛЫҚАРАЛЫҚ МОДЕЛЬДЕРІН ЗЕРТТЕУ ЖӘНЕ ТАЛДАУ**

### **Аңдатпа**

Білім беру қызметтері – бұл пайдасын ең алдымен оны тұтынушы (тұлға мен мемлекет) алатын тауар. Бұл тақырып аясында жұмыс күшінің сапасы, жоғары табыс деңгейі, жұмысшылардың жоғары жалақысы және тұрақты экономикалық өсу сияқты аспектілер маңызды. Мұның бәрі білім беру қызметтерінің инвестициялық сипатын анықтайды. Демек, білім беру деп оның бизнеспен өзара іс-қимылы контекстінде нарық талаптарына, мәдениеттің жай-күйіне, ғылым мен техникадағы өзгерістерге сәйкес білікті жұмыс күшін даярлау жүзеге асырылатын, сондай-ақ қоғамның серпінді дамуына және ұлттық (аймақтық) экономиканың бәсекеге қабілеттілігінің өсуіне бағдарланған әлеуметтік институт деп түсінуге болады. Қазіргі кезеңде жоғары білім беру жүйесінде жүргізіліп жатқан реформалар көптеген мәселелер мен міндеттерді әлі де шешілмеген күйінде қалдыруда. Қазақстанда іске асырылатын білім беру мен ғылымды дамытудың 2020–2025 жж. арналған мемлекеттік бағдарламасы білім беру мекемелері, бизнес және қоғам арасындағы өзара қарым-қатынастардың жаңа деңгейін талап етеді. Бизнес жоғары мектептің міндеттерін де, қиындықтарын да түсінетіні сөзсіз және жалпы кәсіби стандарттарды әзірлеу, білім беру бағдарламаларының мазмұнын қалыптастыру, инновациялық білім беруді дамытудағы еңбек нарығының қажеттіліктерін мониторингтеу сияқты үрдістерге қатысуға дайын. Алайда, экономикалық, басқарушылық және құқықтық аспектілерді қамтитын жүйелік тәсілге негізделген ЖОО мен бизнестің өзара іс-қимылының жаңа тиімді модельдері мен тетіктері қажет. Зерттеудің мақсаты жоғары сапалы инновациялық білім беруді жүзеге асыруға мүмкіндік беретін жоғары оқу орындары мен бизнес-құрылымдар арасындағы өзара іс-қимыл модельдерін жетілдіру бойынша теориялық, практикалық, әдістемелік ұсынымдар әзірлеу болып табылады.

**Тірек сөздер:** білім беру қызметтері, халықаралық модельдер, білім беру, бизнес, инвестициялық сипат, еңбек нарығы, инновация.

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## **ИССЛЕДОВАНИЕ И АНАЛИЗ МЕЖДУНАРОДНЫХ МОДЕЛЕЙ ВЗАИМОДЕЙСТВИЯ ВЫСШЕГО ОБРАЗОВАНИЯ И БИЗНЕСА**

### **Аннотация**

Образовательные услуги – это товар, пользу от которого получает в первую очередь тот, кто его потребляет (личность и государство). В рамках данной темы важное значение имеют такие аспекты, как качество рабочей силы, высокий уровень дохода, высокая заработная плата работников и устойчивый экономический рост. Все это определяет инвестиционную природу образовательных услуг. Следовательно, под образованием в контексте его взаимодействия с бизнесом можно понимать социальный институт, в котором осуществляется подготовка квалифицированной рабочей силы в соответствии с требованиями рынка, состоянием культуры, изменениями в науке и технике, а также ориентацией на динамичное развитие общества и рост конкурентоспособности национальной (региональной) экономики. Проводимые реформы в системе высшего образования на современном этапе все еще оставляют нерешенными множество проблем и задач. Государственная программа развития образования и науки на 2020–2025 гг., реализуемая в Казахстане, требует нового уровня взаимоотношений между образовательными учреждениями, бизнесом и обществом. Несомненно, бизнес понимает задачи и трудности высшей школы, в целом готов участвовать в таких процессах, как разработка профессиональных стандартов, формирование контента образовательных программ, мониторинг потребностей рынка труда в развитии инновационного образования. Однако нужны новые эффективные модели и механизмы взаимодействия вузов и бизнеса, основанные на системном подходе, включающем экономические, управленческие и правовые аспекты. Целью исследования является разработка теоретических, практических, методических рекомендаций по совершенствованию моделей взаимодействия между вузами и бизнес-структурами, которая позволит реализовать инновационное образование высокого качества.

**Ключевые слова:** образовательные услуги, международные модели, образование, бизнес, инвестиционная природа, рынок труда, инновации.