Синергия на образованието и пазара на труда в Казахстан в дигиталната ера – основни области и проблеми

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Synergy of education and the labor market of Kazakhstan in the digital age: main directions and problems

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Abstract:
The rapid development of digital technologies leads to the transformation of labor market requirements, necessitating the updating and adaptation of educational programs and training of specialists. Kazakhstan, as a country striving for the digitalization of the economy, faces a number of challenges in the field of personnel training, including the discrepancy between supply and demand in the labor market, the irrelevance of curricula and the need to develop new competencies. In this context, the study of the relationship between education and the labor market, as well as the development of strategies to promote synergy between these areas, is a key task for ensuring successful economic development and maintaining the country's competitiveness on a global scale.

The article examines the problems of interaction between the labor market and the education system in Kazakhstan in the context of the digitalization of the economy. The authors analyze the current challenges faced by educational institutions and the labor market in the era of digitalization, as well as explore the problems of matching graduate qualifications to the requirements of modern industry. The imbalance of supply and demand in the skills market, the lack of interaction with the business sector, the inefficiency of educational programs and the role of the state in creating conditions for successful adaptation are discussed. The emphasis is on the need for cooperation between educational institutions and enterprises, revision of educational programs and support from the state to provide citizens with the necessary skills in conditions of rapid technological development.

Keywords: digital transformation, education, labor market, synergy, competencies, digital skills, business cooperation, competitiveness.

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ВЪВЕДЕНИЕ

In the modern world, where technological changes are taking place so quickly that they penetrate into all spheres of life, Kazakhstan is no exception. Digital transformation is making radical changes in the structure of the economy, education and labor relations. In this context, the key issue is the interaction of education and the labor market. This article explores the role of synergy between these two sectors in the context of Kazakhstan's reality and the challenges facing the country in the digital age. [1]

The COVID-19 pandemic has become not only a health challenge, but also a catalyst for economic transformation around the world. Kazakhstan did not stay away from this process. Along with the introduction of the principles of digitalization and new

work formats, education is also undergoing changes. This poses new challenges for the country and requires closer interaction between the educational sector and the labor market [2]

ИЗЛОЖЕНИЕ

The digitalization of the economy inevitably causes the need for prompt response and flexible adaptation on the part of the country's educational system. This is due to the fact that rapidly changing technological requirements and structural changes in the labor market require constant updating of professional skills and knowledge among employees. Only an educational system capable of responding effectively to these challenges will be able to provide training for personnel ready to successfully operate in the digital economy.

In the context of the rapid digitalization of the labor market in Kazakhstan, there is a deep transformational process that affects many aspects of the working environment. Automation, robotics, the development of digital platforms and artificial intelligence are reformatting the requirements for the skills and competencies of employees.

The mechanism of interaction between the labor market and the education system in Kazakhstan is a complex and multifaceted issue that requires a systematic approach and careful analysis. Taking into account modern challenges and trends, the effective interaction of these two spheres is becoming a key factor for ensuring the successful development of society and the training of qualified specialists for the future.

The interaction of the labor market and the education system in Kazakhstan includes many aspects, ranging from analyzing the needs of the labor market to the formation of educational programs. It is important to develop modern mechanisms that will keep education relevant, meet the requirements of the labor market and ensure the country's desire for sustainable economic growth. The current state of interaction between the labor market and the education sector in Kazakhstan is characterized by a number of features and challenges that affect the effectiveness of personnel training and the compliance of their skills with the needs of employers.

The development of digital technologies is leading to changes in traditional forms of employment. The gig economy, by providing new opportunities for flexible employment and remote work through digital platforms, is shaping a new landscape of labor relations. This shift creates the need to adapt workers' skills to new forms of work organization. Digital transformation also reinforces the importance of digital competencies. Specialists in the field of artificial intelligence, data analytics and digital technologies are becoming key figures in the labor market. In this regard, educational programs face the challenge of providing students with the necessary knowledge and skills to successfully enter the digital economy.

A hybrid work model combining remote work and office presence is becoming more widespread, which requires new approaches to labor organization and personnel management. At the same time, the importance of soft skills such as communication, adaptation and problem solving in the context of virtual interaction is increasing.

With the increase in the number of digital technologies, the risk of cybersecurity also increases. Information security specialists are becoming an integral part of the modern labor market.

All these changes put forward an urgent task for educational institutions and the business community to adapt educational programs, ensure the availability of retraining and support students in developing the necessary digital skills. Only through the interaction of education and the labor market can we ensure successful adaptation to the challenges of the digital era and the formation of a competitive and qualified workforce.

The education system in Kazakhstan is rapidly adapting to the challenges of digital transformation in the labor market, however, there are several aspects where additional work is required to more effectively meet modern requirements. The labor market, in turn, faces challenges related to the discrepancy between the skills of graduates of educational institutions and the requirements of enterprises. This creates not only problems for graduates, but also slows down innovation processes and business competitiveness.

One of the main problems is the imbalance between supply and demand for certain skills. Technological progress requires new competencies such as digital literacy, programming and data analysis skills. However, the education system is not always able to provide students with relevant skills necessary for successful adaptation to the changing demands of the labor market.

Insufficient interaction between educational institutions and enterprises is another notable limitation. Collaboration with the business sector can provide educational programs focused on practical skills, as well as internships and internships for students.

Some educational programs remain outdated due to the slow pace of changes in curricula. The introduction of flexible and updated programs, as well as the training of teachers in modern methods, would help to improve the correspondence between education and the needs of the labor market. [3]

In addition to the above-mentioned problems, the interaction of the labor market and the education system is also associated with a number of other relevant aspects in modern conditions.

An important element of this dynamic is the role of migration and mobility in the labor market. Kazakhstan, as a country with a diverse national composition and neighborhood with different states, is faced with the flow of migrants and the mobility of its citizens. This creates the need for the education system to take into account the needs of diverse cultures and ensure the mobility of graduates both within and outside the country.

It is also important to note that modern technologies such as artificial intelligence and automation are changing the structure of jobs and skill requirements. In this context, the education system should prepare graduates not only for traditional, but also for new professions and specializations so that they can successfully adapt to a rapidly changing economic environment.[4]

A key tool for successful adaptation and promotion of this interaction is the structural and functional model of specialized training of students in the process of interaction with labor markets and social partners in the digital economy. This model is an integrated tool designed to effectively adapt educational programs to the rapidly changing demands of the digital economy. [5] The model seeks to ensure synergy between educational

institutions, employers and social partners in order to achieve maximum productivity in training. Here are a few key aspects that highlight the importance of this model:

1. Adaptation to the requirements of the labor market. The model provides mechanisms for the rapid adaptation of educational programs to the current needs of the labor market. This is especially critical in the digital economy, where technological innovations can lead to dramatic changes in skill requirements.

2. Improving the performance of graduates. The structured approach of the model, focused on the development of critical skills and the use of digital technologies, contributes to improving the performance of graduates. They are ready for continuous learning and successfully interact with modern technological tools.

3. Partnership with enterprises. The model encourages and supports active cooperation with enterprises and social partners. This partnership not only ensures the renewal of educational programs, but also creates opportunities for internships and practical experience, making graduates more competitive in the labor market.

4. Successful integration of digital technologies.The model includes the effective use of digital educational resources and technologies. This contributes to the formation of students not only theoretical knowledge, but also practical skills in the field of digital economy.

5. Development of flexibility and adaptability. The main element of the model is its flexibility, which allows you to quickly respond to changes in the requirements of the labor market. This is especially important in the field of the digital economy, where dynamism and speed of adaptation are becoming key qualities of successful educational programs.

6. Support for innovation and entrepreneurship. The model provides support for innovation and entrepreneurship, stimulating students to think creatively and providing opportunities for the development of their own projects. This contributes to the formation of independent and enterprising professionals.

7. Stimulating continuous learning. The structural and functional model also encourages continuous learning, taking into account the dynamics of changes in the digital economy. Regular updating of programs and the introduction of new technologies into the educational process help graduates stay on trend and continue their professional growth after graduation.

8. Strengthening the mentoring system. The model pays attention to the mentoring and internship system, which promotes deeper interaction between students and experienced professionals. This approach enriches the educational experience and ensures a smoother transition of students into a professional environment.

9. Individualization of learning. The model strives to individualize learning, taking into account the diversity of needs and abilities of students. This allows each student to develop in accordance with their unique needs and ambitions, which becomes a key aspect in training specialists for the digital economy. [6]

10. Creation of open educational ecosystems. The model actively supports the creation of open educational ecosystems, involving various stakeholders such as industrial leaders, educational institutions and public organizations. This facilitates the exchange of knowledge and experience, which is an important factor in supporting sustainable development.

11. Research and innovation in education. The model actively encourages research and innovation in education. Students and teachers become participants in the process of creating new knowledge, which not only enriches the educational environment, but also contributes to the development of innovations in the digital sphere.

The structural and functional model of specialized training of students in the digital economy is an integral tool that ensures effective interaction between education and the labor market. Her multidimensional approach ensures the flexibility, relevance and sustainability of educational programs, contributing to the successful start of graduates in a modern digital society

ЗАКЛЮЧЕНИЕ

Ensuring that the training of specialists meets the requirements of the modern labor market is becoming a strategic priority for Kazakhstan, which is striving for sustainable development and increased competitiveness in the global economy. Overcoming challenges, such as the mismatch between supply and demand in the labor market, requires joint efforts on the part of educational institutions, the business sector and government agencies. The development of synergy between education and the labor market, as well as the active introduction of modern technologies and teaching methods, are becoming key strategic steps to ensure Kazakhstan's successful transition to the digital economy and ensure the prosperity of its people in an era of global change.

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