approaches to increasing the role of scientific knowledge in socio-economic functioning. Countries with a high level of technology are striving to implement the "University 3.0" model by intensifying the research activities of universities, implementing the concept of start-up's on an expanded scale while ensuring their intensive patent activity. The main trend in the activities of universities in such countries is the commercialization of research results in order to obtain the maximum economic dividends. In the countries of the post-Soviet space, models for the development of universities as centers for creating human resources for various sectors of the economy with a high level of intellectual potential are being implemented, ensuring sustainable innovative development of a business entity. The task of the national higher school is not a formal copying of the university's development models adopted in technologically developed countries, but the development of original models aimed at the formation of a person with a high level of professional skills and harmonization, taking into account the peculiarities of the formation of national educational and cultural traditions.

List of literature used

- 1. Kuznetsov, E. B. «Universities 4.0»: points of growth of the economy of knowledge in Russia / E. B. Kuznetsov, A. A. Engovatova // Innovations. 2016. No 5(211). P. 3–9.
- 2. Intellectual support of innovative activity of industrial enterprises: technical-economic and methodological aspects / O. V. Avdeichik [et al.]. Minsk : Law and Economics, 2007. 524 p.
- 3. Avdeichik, O. V. Fundamentals of scientific and innovative activity / O. V. Avdeichik, L. N. Nekhorosheva, V. A. Struk; ed. by L. N. Nekhorosheva, V. A. Struk. Minsk: Law and Economics, 2016. 490 p.
- 4. Fundamentals of scientific and innovative activity of industrial organizations / O. V. Avdeichik [et al.]; ed. by V. A. Struk, G. A. Khatskevich. Grodno: GGAU, 2021. 366 p.
- 5. Etzkowitz, H. Research groups as quasi-firms: the invention of the entrepreneurial university / H. Etzkowitz // Research Policy. -2003 No. 32. P. 109-110.
- 6. Etzkowitz, H. Rethinking development: circulation in the triple helix / H. Etzkowitz, J. Dzisah // Technology Analysis & Strategic Management. 2008. Vol. 20, No. 6. P. 653–666.
- 7. Etzkowitz, H. Innovation in innovation: The triple helix of university-industry-government relations / H. Etzkowitz, E. Leydesdorff // Social science information. No. 42 (3). 2003. P. 293–337.
- 8. Etzkowitz, H. The triple helix: University-Industry-Government Innovation in Action / H. Etzkowitz. New York: Routledge, 2008. 176 p.

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TRENDS IN THE DEVELOPMENT OF EDUCATIONAL INSTITUTIONS OF HIGHER SCHOOL

The analysis of the main trends in the transformation of higher education in countries with different levels of socio-political and economic development has been carried out. It is shown that the mechanical transfer of models adopted in countries with a high level of technology does not allow the universities of the post-union state to fully realize the benefits due to national, cultural and other traditions that ensure the formation of individuals with a high level of professional knowledge and harmonious development. The trends in the formation of the "University 4.0" model, focused on the economic-centric development of universities, are considered. The inconsistency of methodological approaches to the implementation of this model in the educational space of states formed within the framework of a single educational and economic limits is shown.

The modern economy, positioned as a "knowledge economy" [1], is based on an increase in innovative products for various functional purposes, developed on the basis of scientific results of the modern level. One of the central places in the knowledge economy is acquired by universities – functional institutions that train qualified personnel for all industries that determine sustainable socioeconomic development on the basis of systematic scientific research, the results of which are used both in the educational process and as objects for the implementation and achievement of commercial benefits [2–15]. At the same time, different levels of technological development of states, differences in personnel, cultural, religious and other traditions characteristic of societies belonging to modern socio-political systems make significant adjustments to methodological approaches to the implementation of the new role of universities in the knowledge economy. This aspect involves the development of principles for increasing the importance of universities in the new economy, taking into account the prevailing ideas in society about their goals and objectives.

The purpose of this study was to analyze the main trends in the development of higher education within the framework of the requirements of the new post-industrial economy.

Results and discussion. In literary sources analyzing the changing role of universities in the economic functioning of societies, it is noted that "... the frequency of interactions between universities, industry, and government has been critically increasing over the past half-century. These relationships represent a "triple helix of innovation" implemented by universities, industry, and the state, which is described in the works of Henry Etzkowitz" (emphasis is ours – O. A., V. S., A. A., V. G. [2, p. 3, with reference to [10–13]]). In our opinion, universities permanently interact with the institutional components of socio-economic systems ("industry and government" according to [2]), due to the fulfillment of their fundamental mission – the training of highly qualified personnel for various branches of economic, administrative, social activities in accordance with the strategy of functioning and progressive development. Therefore, in the modern economy, positioned as a knowledge economy, not "... the "frequency" of interactions between universities and components of society is increasing, and the contribution of universities to the development of "knowledge-intensive innovations" is increasing due to the transformation of knowledge obtained as a result of systematic research project activities into practical applications with high demand for the business environment, the system of industrial production, management and the social sphere. This process is realized as a result of the integrational interaction of intellectual potentials, material, technical, technological and personnel base of research (Academy of Sciences), educational institutions (Universities) and industrial business entities (Industrial Enterprises), the essence and methodological principles of implementation of which are set forth in our research, carried out in the early 2000s and summarized in a number of monographs [14–16]. The "triple helix of innovations", proposed in the works of Henry Itskowitz [10–13], is essentially similar in purpose to the integration interaction of the main institutional components of socio-economic systems (Academy of Sciences, Universities, Industrial Enterprises) proposed by us in percolation and mutual diffusion of intellectual resources in a cluster structure focused on the implementation of an innovative strategy of functioning.

It is noted that there is a change in trends in the world university environment [2], "the expansion of the penetration of the higher education system into society (life – long – learning)", which led to the formation of "a new role of universities in the world [2, 6, 7]. In our opinion, the functional role of universities in societies has not changed, since initially they represent educational centers for the formation of relevant knowledge of qualified individuals with a pronounced desire for permanent development and improvement both in professional and moral aspects.

The "trends of the world university environment" noted in [2], first of all, emphasize the decisive role of the intellectual component in the form of knowledge with a high degree of relevance, which allows for the "restructuring of universities" [2] in the direction of commercialization of the scientific results obtained, to occupy a leading position "in world rankings" [2], to implement the concept of "education through life" ("life – long – learning") [2], to ensure the educational process with the use of modern information technologies, taking into account the increasing mobility of students and the increase in the share of distance learning. Universities with low intellectual potential in the absence of effectively

functioning scientific schools, a developed infrastructure for the implementation of project research activities with the availability of modern personnel and equipment cannot fully compete with the higher education system of European countries, North America and the South Asian region.

It is believed that "... modern universities are the core of the knowledge society, the most important channel for technology transfer" (emphasis ours – O. A., V. S., A. A., V. G. [8]). In the work of G. Itskovitz [10] the entrepreneurial academic model of a modern university is defined as "teaching, research and economic development of entrepreneurial activity". The characteristic of "modern universities as the core of the knowledge society, the most important channel for technology transfer" [2] refers mainly to the regional societies of technologically developed countries (for example, the so-called "Silicon Valley"), since the knowledge society, which determines the characteristic development of the economy, is in the process of formation with significant differences for different states, especially for states with the so-called transition economy. At the same time, the world's leading universities with established scientific potential are indeed "institutions that play the role of innovation hubs within the framework of the national innovation system." This is evidenced, first of all, by the number of innovative solutions developed, the novelty of which is confirmed by a large number of patents for inventions [2]. Domestic universities have not developed an effective infrastructure for creating innovative products with high demand by the business community and economic entities of the industrial sector of the economy, therefore, patent and licensing activities are largely formalized and are not a priority activity of the teaching staff and service specialists who assist in the commercialization of intellectual and industrial products. Property.

It should be noted the prevalence in the "academic model of a modern research university", proposed by G. Itskovitz, an educational component that ensures not only the effective functioning of the knowledge economy through the training of "innovatively receptive specialists" [2] ("knowledge workers") [14], but also its own research infrastructure for the permanent generation of products of intellectual activity with high potential commercialization.

There is an increase in the economic efficiency of universities in technologically developed countries. For example, "... the return on every million pounds sterling invested by the UK Treasury in higher education amounted to 1.3 million pounds sterling in the form of investments in other sectors of the country's economy" (emphasis is ours – O. A., V. S., A. A., V. G. [3]). To implement effective innovation activities, universities must have a formed infrastructure with a long experience of practical project work in the presence of scientific schools in priority areas of development in accordance with the adopted strategy. Such experience, characteristic not only of universities in the UK, but also of other EU countries, North America, Canada, etc., does not have sufficient grounds for implementation in the higher school of Belarus, which includes 51 universities, a significant part of which has been formed and functioning over the past 30 years without sufficient scientific and personnel support. Therefore, the formal transformation of Belarusian universities into the "University 3.0" model by mainly creating individual components of the innovation infrastructure will not allow achieving any significant economic results due, first of all, to the lack of a portfolio of innovative developments with a high degree of completeness and readiness for implementation in a specialized production of an industrial enterprise with practical experience in project activities.

The paper [2] notes that even in technologically advanced countries, for example, the United States ,... universities today are just entering the path of capitalizing their knowledge, learning to commercialize the results obtained in the framework of interaction with the business community and the state, to manage the intellectual property as efficiently as possible. Universities at the current time are ready to participate in the process only as developers or executors" (emphasis ours – O. A., V. S., A. A., V. G. [2, p. 4]). It should be emphasized that the process of implementing the qualifications of specialized specialists, obtained in the form of knowledge in the educational process at the university and used by them within the framework of their powers (competencies) in the functioning of business entities of various purposes and departmental subordination, which ensures the achievement of economic efficiency (called in [2] "capitalization of their knowledge"), occurs permanently throughout the entire period of existence of higher educational institutions, as it is an integral part of their function embedded in the strategy of creation.

The paper [2] formulates the signs of a new role of universities in the knowledge economy, which consist in the fact that "... Firstly, the contribution of modern universities to the innovative development of the country is increasingly determined by the importance of the intellectual property being created and commercialized. Secondly, modern universities are institutions of society that best solve the task of translating knowledge into intellectual capital through the use of resources of globality, openness, dynamism, a constant influx of active youth. Thirdly, universities no longer only fulfill orders for research and development, but they themselves are actively creating technologies and technology companies. Fourthly, universities today are becoming leaders and centers for the creation of new technological industries" (emphasis is ours – O. A., V. S., A. A., V. G. [2, p. 5]). In our opinion, all the "competitive advantages of universities" listed in [2] are well-known and traditional, since universities have traditionally interacted in the educational society with the possibility of participation of teachers and students in the educational process in various universities located in developed countries, in modern universities specialists of different countries and professional interests fruitfully carry out educational and research activities. Multidisciplinary research projects for a number of decades have been an effective form of convergence of NBIC technologies, systemic research activities carried out by universities with high ratings have always been and are a potential for intellectual development of specialists, including "in new fields of knowledge and professions" [2].

Considering that "research competencies" are the prerogative of model 2.0 universities, the authors make a fundamental methodological error, since the task of modern universities is not to form competencies, but to systematic scientific activities with the participation of the main human resources potential, without which the implementation of the "3.0" and "4.0" (?) models is impossible. Erroneous, in our opinion, is the attribution to the model "University 3.0" as the main components of the creation of "market companies ("start-up's")" and "entrepreneurial competencies", since without the presence of intellectual potential in the form of intellectual and industrial property objects protected by high-level patents, these components are formalized criteria for assigning universities to a new model without changing the essential content of their activities.

The definition of model 4.0 universities as developers of "new markets and infrastructure" [2], in our opinion, destroys their fundamental goals, which are to form and develop the intellectual potential of specialists to demonstrate their creative abilities in professional research, educational, managerial, social or other activities. Universities are centers for the formation of high-level knowledge and relevance for the comprehensive development of individuals within their professional competencies and existence in the social sphere. Empowering universities to form "new markets and infrastructure" unreasonably separates them from the current system of economic activity of regions and states, including the functioning of industrial production and social security sectors within the framework of the state strategy for sustainable socio-economic development.

The fundamental function of universities is to create the prerequisites for the progressive development and effective functioning of all institutional components of the state society, and not just their own, even when receiving significant economic dividends. Universities ensure the harmonization of the functioning of institutional components due to the diffusion and percolation of intellectual resources in various forms of their manifestation in the social environment.

The proposed model "University 4.0" seems to us to be an artificially formed concept, since universities have always "implemented the function of a provider of knowledge about the future." Universities, in accordance with their basic function, cannot be a "leader in the development of high-tech industries" [2], since this aspect of activity is the prerogative of the state, which determines the development strategy and methodological principles of its implementation with the participation of socio-economic, technological, personnel, information development, cultural, national, religious and other traditions. The allocation of universities to institutions that determine the trends of state development in favor of the implementation of the implemented concepts of political correctness, multiculturalism, tolerance, communicativeness, etc., in our opinion, contributes to a decrease in national intellectual potential to the detriment of socio-economic and political development.

Analysis of literary sources devoted to the problems of transformation of higher education clearly indicates the need to change the intellectual support of the educational process.

List of literature used

- 1. Knowledge Economics: Internationalization and Systematics of Innovation / B. Melnikas [et al.]; ed.: K. Gyachas [et al.]. Vilnius: Lithuanian Innovation Centre, 2013. 704 p.
- 2. Kuznetsov, E. B. « Universities 4.0»: points of growth of the economy of knowledge in Russia / E. B. Kuznetsov, A. A. Engovatova // Innovations. 2016. No 5(211). P. 3–9.
- 3. Universities and economics [Electronic resource] // Russian Science and Technology. 2012. Mode of access: https://strf.livejournal.com/ 169656.html. Date of access: 21.01.2023.
- 4. Bajada, C. Interdisciplinary Business Education: Curriculumthrough Collaboration/ C. Bajada, R. Trayler // Education & Training. 2013. Vol. 55, № 4–5. P. 385–402.
- 5. A Roadmap for Forming Successful Interdisciplinary Education Research Collaborations: A Reflective Approach / D. Bossio [et al.] // Higher Education Research and Development. 2014. Vol. 33, № 2. P. 198–211.
- 6. Clark, B. R. Creating Entrepreneurial Universities: Organisational Pathways of Transformation / B. R. Clark // Issues in Higher Education. Oxford: Pergamon Press for International Association of Universities, 1998. 180 p.
- 7. Clark, B. R. Sustaining Change in Universities: Continuities in Case Studies and Concepts / B. R. Clark. New York: Open University Press, 2004. 220 p.
- 8. Salmi, J. Constructing Knowledge Societies: New Challenges for Tertiary Education / J. Salmi // Higher Education in Europe. Vol. XXVIII, No. 1. 2003. P. 65–69.
- 9. Crow, M. M. Designing the new American university / M. M. Crow, W. B. Dabars. Baltimore : Johns Hopkins University Press, 2016. 344 p.
- 10. Etzkowitz, H. Research groups as quasi-firms: the invention of the entrepreneurial university / H. Etzkowitz // Research Policy. 2003. No. 32. P. 109–110.
- 11. Etzkowitz, H. Rethinking development: circulation in the triple helix / H. Etzkowitz, J. Dzisah // Technology Analysis & Strategic Management. 2008. Vol. 20, No. 6. P. 653–666.
- 12. Etzkowitz, H. Innovation in innovation: The triple helix of university-industry-government relations / H. Etzkowitz, E. Leydesdorff // Social science information. No. 42 (3). 2003. P. 293–337.
- 13. Etzkowitz, H. The triple helix: University-Industry-Government Innovation in Action / H. Etzkowitz. New York: Routledge, 2008. 176 p.
- 14. Intellectual support of innovative activity of industrial enterprises: technical-economic and methodological aspects / O. V. Avdeichik [et al.]. Minsk: Law and Economics, 2007. 524 p.
- 15. Avdeichik, O. V. Fundamentals of scientific and innovative activity / O. V. Avdeichik, L. N. Nekhorosheva, V. A. Struk; ed. by L. N. Nekhorosheva, V. A. Struk. Minsk: Law and Economics, 2016. 490 p.

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APPLICATION OF EMOTIONAL COMPONENT IN MUSIC EDUCATION OF PRIMARY SCHOOL CHILDREN IN CHINA

Until recent years, students have mental health problems, which has sounded the alarm for us. In music education, it is also a good way to correctly guide students to appreciate positive music and use music to coordinate psychological problems. Mental health usually refers to a positive and healthy mental state. It should be analyzed from physical, psychological, social, behavioral and other factors, not only to see whether it has organic or functional abnormalities, but also to see whether it has subjective discomfort, and whether it has socially recognized unhealthy behavior. For many years, enough attention has not been given students' mental health problems.