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THE USE OF FORSITE IN THE EDUCATIONAL PROCESS OF THE HIGHER EDUCATION SYSTEM IN UZBEKISTAN Shomurotov Bahrom Husanovich,

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ABSTRACT. The article is dedicated to the role and importance of foresight in environmental education in Uzbekistan, the need to form and develop ecoforesight competence in future specialists. The use of foresight in the educational process of developed foreign higher education organizations is analyzed, and examples of the work carried out on the use of eco-foresight technology in higher education institutions in Uzbekistan are presented.

Key words: foresight, eco-foresight, trend, technology, future prediction, scenario, strategy, educational process competence

INTRODUCTION

The perspective of comprehensive socio-economic policy implemented in Uzbekistan develops depending on the education system. The international cooperation in the field of education is bearing fruit, and the future strategy of the further development of the education system and adaptation to the needs of the times has been clearly defined by the President Sh.M. Mirziyoyev. One of the main factors of improving the quality of education is the application of the most modern technologies based on the experiences of the world's leading higher education institutions. It should be noted that in management, it is important to correctly predict the impact of production enterprises or companies on the environment, and to reduce its negative impact in the future. This, in turn, is done by forming and developing eco-foresight competence in future ecologists. However, in the fields of ecology and environmental education in Uzbekistan, scientific and research work on the issues of foresight technology and formation and development of ecoforesight competence in future specialists has been carried out very little. Revealing



aspects of eco-competence of future specialists is determined by the content of psychological-pedagogical, technological and scientific training. This requires the improvement of the didactics of developing eco-foresight competence in pedagogy [1].

RESEARCH METHODS

In the research process, the analysis of scientific and teaching-methodical literature, pedagogical observation, comparative analysis, generalization, pedagogical experiment-test and foresight methods were used.

RESEARCH RESULTS AND DISCUSSIONS

Currently, developed countries are using foresight technology as a key technology in creating a long-term future strategy. For example, in European countries, they pay great attention to the comprehensive use of foresight methods in predicting the future of education based on the Bologna process educational programs, and higher education institutions are actively involved in this. A foresight system for predicting scientific and technical directions has been created at the University of Manchester, Great Britain. Foresight research is carried out at Sigularity University in the USA in cooperation with multinational corporations such as NASA, Google, YE-rlapet Ventures, Autodesk, Cisco, Kauffman Foundation and Nokia [2].

In Russia, higher education institutions take an active part in predicting the main trends in the country's scientific and technological development. In order to predict the trends of scientific and technological development, in 2011, a regional center was established in Russia in cooperation with 6 prestigious universities. The task of the center is to conduct foresight research in cooperation, develop relations with international foresight centers, form expert groups with the participation of representatives of various fields and establish their regular contacts, support and involve experts in foresight research [3].

In the project "Training Future-Oriented Entrepreneurs in Universities and Companies" carried out by beFORE (Becoming Future-Oriented Entrepreneurs in universities and companies), the foresight programs conducted by universities in



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developed countries were extensively and comprehensively analyzed [4]. This project is an ERASMUS+ project, financed under the Knowledge Alliance scheme. The goal of the project is to transform entrepreneurship education with university education and train company employees on business practices. It contains information about foresight studies carried out by higher education institutions of countries such as the USA, Denmark, Poland, Germany, Canada, Australia, Great Britain, South Africa, Finland, and Malta.

Foresight research experiences of higher education institutions in developed countries show that using Foresight is the best way to develop long-term educational development strategies for 10-30 years and concepts aimed at modernizing higher education and improving the quality of education. will give. Strategic concepts developed on the basis of such technology allow to adapt to future changes without repeating standard solutions [5].

No country, including the USA and Japan, which spends hundreds of millions of dollars a year on science, can carry out full-scale research in all scientific fields today. In such conditions, they study the most promising directions through scientific research on the basis of Foresight, pay great attention to the development of this field and, as a result, maintain their leading positions. For this reason, developed countries are developing special long-term programs that determine the priority directions of science and technology using Foresight technologies [6].

Foresight programs conducted by foreign universities include "Foresight and Strategic Analysis" program of the Adam Mickiewicz University (Poland), "Strategic Foresight" program of Białystok University of Technology (Poland), "Strategic Foresight" program of the California College of Culture (USA), "The Future" of the University of Berlin research" program (Germany), Ontario College of Culture and Design "Strategic Foresight and Innovation Activities" program (Canada), Regents University "Strategic Foresight" (Doctor of Strategic Leadership) program (USA), "Knowledge and Foresight Techniques" of Swinbury University of Technology program (Australia) Manchester University's "Foresight Art and Horizon Scanning: Anticipation, Recommendation Preparation, Future



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Transformation of Science and Innovation" program (Great Britain), Podstam University's "Strategic Innovation and Shaping the Future" program (Germany), Turku University Economics Foresight projects such as "Master's Program for Future Research" (Finland) of the school [7] can be used as an example.

In the following years, foresight began to occupy a large place in professional education in developed countries. YE.Brady [8], T.V. Yakubovskaya, B. Pugacheval [9] showed in their scientific works that foresight technology occupies an important place in the formation and development of the innovative economy.

In the scientific researches of R. W. Lent [10], L. Mark [11], J. L. Swanson [12] from foreign scientists, strategic planning based on foresight, construction, revision and development of one's career and preparation for adaptation to a new environment, professional behavior and issues related to professional choice are widely covered. Relatively little research work has been carried out on the development of future managers' foresight competence by applying foresight technology methods to the educational process of training managers. Most of the scientific-research works on the use of foresight in the educational system carried out in foreign countries are devoted to the issues of foresight strategy and technology in the economy.

In the era of high-level scientific and technical development and strong competition, future specialists, especially managers and executives engaged in management activities, at the level of ministries, can see the future of economic sectors, regions and districts or a specific enterprise, institution, company, long-term they are required to have the ability to create development strategy scenarios [13]. The use of foresight technology is the most effective and reliable in the development of such long-term strategies, concepts and technological roadmaps. For this, it is necessary to develop the foresight competence of future managers. For this purpose, in 2019, the draft Presidential Decree No. ID-3800 on "Establishing foresight centers in leading higher education institutions of the Republic of Uzbekistan" was prepared and discussed.



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Analysis of the educational process of developed foreign countries in educational programs "Foresight management", "Foresight technology methods", "Modern approach to foresight-based planning", "Foresight scenario planning", "Foresight organization and management", "Foresight in marketing technology", "Foresight - expertise in management", "Organization of foresight research", "Strategic drift", "Foresight competence in expertise" and "New market foresight" are included [14].

CONCLUSION

Forsight is a relatively new technology in Uzbekistan. In 2019, the draft Presidential Decree No. ID-3800 on "Establishing foresight centers in leading higher education institutions of the Republic of Uzbekistan" was prepared and discussed. However, although little scientific research work on foresight has been carried out in Uzbekistan to date, the formation and development of eco-foresight competences in future specialists is necessary for the inclusion of foresight topics in the curriculum of specialist subjects and the long-term development of economic sectors. the practice of using foresight technology in creating a long-term strategy and forming eco-foresight competence among future specialists in the higher education system [15]. For example, starting from the 2022-2023 academic year at the Karshi Engineering Economics Institute (Uzbekistan) in the field of "Management" education, "Foresight management", starting from the 2023-2024 academic year, "Ecology and environmental protection" "Ecological foresight" subjects were included in the elective subject block of the science curriculum, and a curriculum, subject syllabus and study guide were developed for these subjects. As a result, future ecologists will be able to acquire theoretical knowledge and practical skills on the essence of foresight, foresight methods and their use methods, stages of foresight project implementation, long-term forecasting based on foresight, creating scenarios, developing strategic plans in the environmental field.

REFERENCE

1. Ruff F. Corporate foresight and company future strategies.URL: <u>http://unido</u>.



Isachenko S.N. Bayukova S.N. (2014) Forsayt: zarubezhnyy i rossiysky opyt. //Model, system, network and economic, technical, natural and social. #1(9).
P. 30-34.

3. Georghiou L., The UK Technology Foresight Programme. Futures, 1996. 28(4), P. 359377.

4. Rakhimov O. D., Chorshanbiev Z. E. Prospects for the application of digital technologies in training the" labor protection" course //European Journal of Life Safety and Stability (2660-9630). -2021. - T. 2. - C. 34-40.

5. Lanskih A.N. Forsayt kak novaya methodology upravleniya razvitiem vyshey shkoly. //Upravlencheskie science. 2011. #1. P.60-64

6. Knitel M.V., Larionov P.A. Use of technology "Forsayt" and training. //Electronic scientific magazine "Science and perspective". #1. 2016. URL:https://cyberleninka.ru/article/n/ispolzovanie-tehnologii-forsayt-v-protsesseobucheniya/viewer

7. Brady E., Gilligan R. The life course perspective: An integrative research paradigm for examining the educational experiences of adult leavers. Children and Youth Services Review.2018; 87: rr 69–77.DOI: 10.1016/j.childyouth.2018.02.019

8. Pugacheva N. B. Foresight as a component of modern professional education management. //Professional'noye obrazovaniye v Rossii i za rubezhom. Professional Education in Russia and Abroad. 2010; P.65–69.

9.Lent R. W. Career-life preparedness: Revisiting career planning and adjustment in the new workplace. //The Career Development Quarterly. 2013. № 61: R.2–14. URL:<u>https://ru.scribd.com/document/46238215/Career-LifePreparedness-Revi</u>

<u>10.</u>Mark L., Savickas M. L. Vыstuplenie na seremonii vrucheniya premii Leonы Tayler, 2012 g.: Sozdanie karerы — akterы, agentы i avtorы. <u>Tom: 41</u> <u>vыpusk:4.-</u>str.648-662. <u>URL:http://dx.doi.org/10.1177 /0011000012468339</u>

11. Swanson J. L., Schneider M. Minnesota theory of work adjustment. In: Brown S. D., Lent R. W. (eds.). Career development and counseling: Putting theory and research to work. 2nd ed. Hoboken, NJ: Wiley; 2013. -p. 29–53.



https://scopusacademia.org/

12. Dustkabilovich R. O. et al. Foresight as an Innovative Technology for Researching the Future Development of Universities in Uzbekistan: First Steps towards Foresight //Psychology and Education Journal. $-2021. - T. 58. - N_{\odot}. 5. - P.$ 1838-1847.

13. Rakhimov O. et al. Positive and negative aspects of digitalization of higher education in Uzbekistan //AIP Conference Proceedings. – AIP Publishing, 2022. – T. 2432. – №. 1.

14. Rakhimov O. D., Kh M. Y., Ashurova L. Initial foresight studies in the higher education system of Uzbekistan //Modern education (Uzbekistan). -2021. - no. 4. - P. 101.