

The Role of University Additional Professional Education in Regional Ecosystem Development

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ABSTRACT

Any country’s human resources quality is a key factor in its competitiveness, therefore, the current development of lifelong learning support systems is determined not only by the mechanisms of professional competencies enhancement in accordance with new market demands and technological changes, but also by the speeding of transformations and the unpredictable economic changes. The processes of digital transformation of the economy made the interaction of professional education and the labor market inevitable, while the role of additional professional education has grown significantly. At the stage of digital transformation of society and the economy the labor market is characterized, on the one hand, by the disappearance of traditional professions and the emergence of new ones meeting the needs of the digital economy and society and, on the other, by the shortage of professionals with new competencies. This shortage is evident in many spheres, but especially in the spheres of high-tech. The problem of the personnel shortage can be solved with the strong pool of regional additional professional education system resources which exists mainly in higher education institutions. To find the solution, various forms of interaction and collaboration between educational and research organizations are necessary. The article presents the results of a theoretical research on the current state and prospects for the development of additional professional education in Higher Education Institutions. The authors identified the main trends in the development of additional professional education and defined the role of higher education in the development of a regional educational ecosystem with the emphasis on the primary role of regional universities in the sustainable development of the economy, education and human resources of the region.

Keywords: *additional professional education, higher education, regional educational ecosystem, regional economy, regional labor market*

1. INTRODUCTION

It seems impossible to solve the problem of creating a new generation of personnel if there is no model of the regional educational ecosystem with additional professional education (hereinafter – APE) as its key element. The educational ecosystem develops the ability to learn and retrain, to adapt to different situations through various educational formats [1].

From a scientific point of view, the ecosystem approach is still being formed, however, there are many publications in foreign and Russian languages. In 2020, Skolkovo Moscow School of Management and Global Education Futures conducted a research on educational ecosystems. Having studied more than 40 educational ecosystems from around the world, experts came to the conclusion that the new approach will bring changes in many areas of life: it will show new ways of learning, thinking and it will

teach to live and cooperate in a new way [2-11]. D. Eisenberg was one of the first to include the academic community as an integral element in the ecosystem approach model and to characterize the ecosystem approach [12].

The increased interest to the ecosystem approach in Russia is caused by the trends of implementing the state policy of innovative development of the country, particularly, within the framework of the projects “National Technology Initiative” and “University 2035”, the methodological foundation for which is provided by Agency for Strategic Initiatives and the Russian Venture Company. A number of researchers define the special role of APE in the establishment and development of educational ecosystem. The demand for APE is explained by the quick and high-quality acquisition of additional qualifications and relevant knowledge without interrupting work, creating a good springboard for the development of human capital in the region and the country as a whole, performing a significant social function to curb unemployment and to develop regional economic systems [13]. We agree with V. Timchenko that a single APE institution cannot become an ecosystem, but it can become either an active participant in the existing ecosystem, or an initiator and integrator of the ecosystem under creation [14].

Since 2018, the additional education provided by higher education institutions has received a new impetus due to several factors.

First of all, there was an influence of new national ranking of universities based on three key missions of the university: the quality of education, research activity and interaction with community. The third mission is treated as a social or entrepreneurial one, and the close attention to this mission influences the increased interest in APE programs implemented by Higher Education Institutions (hereinafter – HEIs).

Secondly, universities have acquired significance as centers of regional development in three national projects: “Education”, “Science”, and “Digital Economy”. Thirdly, Russia joined the world movement “University of the Third Age” aimed at social enlightenment and education of the elderly. Universities should build systems of lifelong learning that will accompany graduates throughout their lives [15].

The national project “Education” includes the federal project “New Opportunities for Everyone” aimed at giving the citizens opportunities to

continuously update their professional knowledge and acquire new professional skills, to increase the availability and variability of training programs by creating an integrated platform for lifelong learning with 15 million users by 2024, as well as to enlarge the number of people studying at HEI lifelong learning programs up to 3 million by 2024 [16]. This project specifies that universities should become centers of continuous education in the country, ensuring that working citizens update their professional knowledge and acquire new professional skills.

The idea about the APE of highest quality implemented by universities was voiced by the M. Borovskaya, Deputy Minister of Science and Higher Education of the Russian Federation, in her speech at the Gaidar Forum 2019; she argued that “the system of additional professional education in Russia is now developing separately from higher education, while training in the relevant programs should be conducted at the universities” [17].

At present, this message is supported by the implementation of the national project “Demography” (program “Promotion of Employment”), aimed at training citizens looking for work or wishing to retrain at the universities. Among the key performance indicators in the state program for universities support “Strategy 2030”, there is an indicator of the number of students trained in APE programs, including the students of the university. Each stage of education passed by students as “internal consumers” (those who already graduated or are still studying at a given university) can be accompanied by the training in APE programs.

At present, the efficiency of the APE university department is determined by the flexibility in approaches to the requirements of the educational services market and the demand of potential clients, the ability and willingness to offer relevant educational programs, reducing the risks of losing the student population [18-23]. One should note that universities are most prepared for the implementation of high-quality APE programs because they have highly qualified teaching staff.

Thus, in Russia, the role of APE as a parallel education is increasing along with the development of major university educational programs, therefore, despite the current difficulties, the development of APE in Russian universities seems to be promising and attractive both from the point of view of competitiveness and from the point of view of the development of regional educational ecosystems [24-26].

2. MATERIALS AND METHODS

The research purpose is to determine the role of HEIs in the establishment and development of regional educational ecosystems. While achieving the purpose, we have fulfilled the following tasks:

- analyzed current research on the state and development of APE in present-day Russia;
- studied current research on the development of educational ecosystems in Russia and abroad.

As a result of analyzing, synthesizing and generalizing research literature ideas, the main trends in the establishment of regional educational ecosystems through the development of the APE system at universities in the Russian Federation were identified.

3. RESULTS

New models of business activity and management are often placing completely new demands on the human resources of organizations. The changing conditions of professional activity require the individualization of professional development profiles and the flexibility of the qualification framework, making the APE system update necessary. The APE system is the most mobile being influenced by the changes in the labor market; it acts as an intermediary between the training program and the requirements of a particular vacancy by providing competencies adapted to market changes. In addition, many young people are aware of the need for continuing education, since today's employer is interested in optimizing costs, and, accordingly, in expanding the functionality of each employee. Today, APE guarantees university graduates, working citizens, persons of pre-retirement age the competitiveness in the labor market. Most of the higher education programs provide only a theoretical introduction to the profession, while the APE program gives practical dimension and appropriate qualifications.

The primary importance of continuing education is enshrined in a number of strategic documents, including priority projects in the field of education, the program "Digital Economy of the Russian Federation", as well as in the state program for universities support "Strategy 2030". The increasing role of APE in this program speaks of the imminent inevitable transformation of APE in universities due to the regional dimension of the universities' goals, a change in marketing policy focused on working with

applicants. The success of continuing education at a university is largely determined by the readiness for constant changes, i.e. the ability to predict new needs and offer relevant educational programs.

Including the student population in APE simultaneously with their studying the major university educational programs is one of the promising areas of the university APE system development. The simultaneous mastering of APE programs by students of higher education programs in order to form additional competencies and qualifications is indicated in the state program for universities support "Strategy 2030".

Students of major educational programs who at the same time study at APE programs can build an individual trajectory of learning due to the synergy of invariant and variable modules of the programs. At the stage of digitalization of society and education, e-learning and distance educational technologies expand the capabilities of the APE system, but at the same time also impose higher requirements on students and teachers, especially on their digital competence. Besides, in some regions of Russia, world-class scientific and educational centers have been created; they are designed to combine research, production and education. Scientific and educational centers are implementing their strategies in close cooperation with universities, regional research organizations and industrial enterprises to develop the scientific potential of the region, also through the joint implementation of APE programs.

The development of APE in higher education directly depends on the changes and transformations of society, its economy, the university itself, the regional labor market, and the entire system of higher and professional education. The development of the university APE system takes place in the digital educational environment with the network interaction of organizations and enterprises of various types; the interconnected and diverse subjects are simultaneously included in the APE process, which allows for the statement that the university APE system is a component of the regional educational ecosystem.

Thus, the problem of on-going creation of new generation personnel is being solved by the regional educational ecosystem, one of the key elements of which is the APE of regional universities. At present, the university APE system has become the continuous professional education center which gives new competencies to students, to the working population of the region, including those of pre-

retirement age, those currently looking for job and the unemployed, to university researchers and teaching staff, to regional research organizations, and the professionals of real sector of the economy.

4. DISCUSSION

Since universities are assigned a strategically important role in the development of the educational regional ecosystem through the formation of new competencies and qualifications among the consumers of APE services, there is a risk of identifying APE of universities with a “factory” for personnel training. In this regard, there are concerns about a decrease in the use of the research potential of universities during the implementation of educational programs for advanced training and professional retraining, which will undoubtedly affect the quality of the regional educational ecosystem.

5. CONCLUSION

In the course of research, the role of university APE in the establishment and development of regional educational ecosystems in present-day Russia was determined. The main trends in the establishment of regional educational ecosystems through the development of APE system at universities have been identified.

AUTHORS' CONTRIBUTIONS

The authors made an equal contribution to the study: collection and analysis of material; definition of goals and objectives, research methods; formulation and scientific substantiation of conclusions, registration of key research results in the form of an article.

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