

Continuing Vocational Education in Russia: Challenges, Problems and Principles of Implementation

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Abstract— The problem of continuing professional education is relevant and complex. It is relevant because the system of continuous professional education should become an adequate response, both to global trends and to reducing the sources of Russia's sustainable economic growth under the sanctions. Its complexity is confirmed by the absence of a holistic system of continuing education, even in those European countries that are leaders in this field. The main objective of this paper is to systematically analyze the state and problems of Russian vocational education in the context of challenges. The challenges facing the Russian system of vocational education are explored. It is suggested that the main challenges are the increase in the adaptive properties of this system and the strengthening its competitive positions in the international educational space. The analysis of the contradictions in the level of demand for vocational education services, the offering of these services and the interaction of supply and demand were carried out to understand the extent to which the system is ready to respond to these challenges. Key problems of transition to the model of continuous vocational education based on the results of the analysis, are formulated. The criteria for selecting measures aimed at resolving contradictions were proposed, the main one is the optimal ratio of flexibility and social security. Methods of logical and statistical analysis, systemic and institutional approaches were used in the process of work. The most significant sources of information were studied.

Keywords— *life-long learning, adult education, continuing vocational education, professional, social and personal competition, educational market*

I. INTRODUCTION

Creating a flexible and dynamic system of lifelong professional learning is a mandatory requisite for human capital growth, innovative development and competitiveness of any country. This problem is extremely topical for Russia, which has to make a technological breakthrough today in the conditions of economic sanctions and relying only on its internal sources of growth.

That is why it is relevant to ask a questions about to what extent the Russian system of professional education, created by now, meets the requirements of innovative economy. So, the aim of our research is system analysis of the state and

problems of the Russian professional education in the context of today's challenges.

Any research study implies that its underlying concept is defined at a starting point. Despite the fact that lifelong learning is a driver for transformations in the modern educational systems of different countries, the range of opinions today is rather broad. Russian experts also take part in the discussion [Starodubtsev, Shepel and Kiseleva, 2011, p. 69; Shkarlupina, 2009, p. 71; A cluster model of innovative development of a university, 2008, p. 125]. International organizations have made their contributions to understanding the term, for example, UNESCO [UNESCO Institute for Lifelong Learning, 2015; UNESCO Institute for Lifelong Learning, 2009], European Commission [A Civil Society View Adult Education in Europe 2017; A bridge to the future: European policy for vocational education and training 2002-10, 2010; A Memorandum on Lifelong Learning, 2000]. Continuing education is actively supported by the governments of Finland [Koukku, Kyrö, 2014], Sweden [Skolverket, ReferNet Sweden, 2016], , Belgium [Mathou, 2016], France [Grillot, 2013; Mathou, 2016], the Netherlands [Cedefop, 2016].

We fix upon the definition from the dictionary of education of the CIS countries: Lifelong learning is education throughout people's life which is ensured by the consistency and integrity of the educational system, creation of opportunities for self-education and balanced personal development, a totality of successive, coordinated, differentiated educational programs of different stages and levels, which guarantee citizens the implementation of the right for education and provide the opportunity to obtain general education and professional training, retraining, improve qualifications throughout people's life [Pugach , Vorozheikina , Zhukovskaya , 2012, p. 117]. An additional difficulty for the research is the visualization of the current ideas in a quite lengthy time interval in the future, provided the uncertainty of the changing external environment. Judging all the above-mentioned from the position of the methodology for analysis, attention should be paid to a system approach.

Within a system approach, lifelong learning can be considered as a socioeconomic system including two subsystems: general education and lifelong professional learning. "Lifelong professional education and learning are

education and learning which follow the initial education or entrance to the labor market, aimed at helping citizens in improving or updating knowledge and/or skills, mastering new skills for moving up a career ladder or retraining, further personal and professional development" [Tissot, 2004, p. 19]. Every subsystem functions according to its own rules and depends on others at the same time. The system of professional education has a leading role. It is more massive and provides progressive professional and personal development throughout people's life. Objectively, it is this system which can be a driver for integrating the subsystems into a single entity and thus ensure the possibility for multi-dimensional movement of an individual in the educational space at all life stages.

At the same time, lifelong professional learning must be recognized as an independent socioeconomic system, as it has general systemic properties. Let us note only some of them:

- complexity, which is manifested in the hierarchical structure of the system, diversity of linkages and relationships between its elements. Each of several interrelated elements has a different functional load and is at different stages of regulatory status and practical development. From our standpoint, it seems strategically correct to consider the system of lifelong professional learning as an interrelation of institutional forms, which include formal and non-formal education, and non-institutional forms, which imply informal (spontaneous) education. Educational institutions (colleges, trade schools, technical schools, universities, academies, corporate universities, etc.) organize formal education (basic or additional professional education). The sphere of non-formal professional education can be represented by enterprises which train people at workplaces or education in the form of tutorship, an institution (consulting firms, inter-sectoral staff-training centers, etc.) which offer various courses, workshops, short programs, organize professional conferences or seminars, but often do not issue educational documents. Today one of the main institutions of both formal and informal education is topic-based Internet forums or online learning. Educational providers have already been competing with the existing educational institutions. However, even bigger competition must be expected by educational institutions on the part of transnational education entities;

- openness, which is revealed in the fact that the market is affected by constant changes in the external environment. The major factors are a change of the technological paradigm, digitization and globalization of the economy, increase in life expectancy, a possible growth of pension age, the economic sanctions and the policy of import substitution in the key sectors of the national economy. A combination of these factors forms a development vector for lifelong professional learning in the RF;

- adaptability, which implies an internal ability to maintain sustainability and structural-functional integrity under an external impact. A mechanism for regulating the development trajectory of the system of lifelong professional learning must be an open process, preconditioned, on the one hand, by the challenges on the part of the external environment and, on the other hand, consider the objects of transactions and the nature

of interaction of all subjects in the educational sphere. To our mind, some important challenges are:

- recognizing the idea of lifelong professional learning as a mission of all educational institutions, business and state; understanding ubiquitously that it must solve not only tactical, but also strategic problems of the innovative economy in the conditions of sanctions;

- developing a mechanism for mastering and updating modern competences, which allows an individual to adapt to growing complex socioeconomic problems throughout life in the conditions of volatile environment;

- ensuring the best interaction of flexibility and social security in the sphere of lifelong professional learning and achieving the synergy of the economic and social effect;

- ensuring self-organization, innovation and competitiveness of Russian lifelong professional learning for its successful integration into the national economy and the international educational space, increasing the degree of readiness for an update and change in the conditions of uncertain strategic requirements for the system.

- the need for institutional transformations in the mechanisms of interaction between the state, business, educational and academic community.

In order to respond to these challenges, it is necessary to understand what is wrong in the educational system. In our opinion, it is necessary to address the contradictions so as to identify the problems. Let us start with the characteristic of contradictions in the demand structure. The main ones are:

- contradiction between the massive demand for higher education and insufficient (for innovative development of the economy) demand for additional professional education services. According to the results of the monitoring WCIOM, it became known that 71% of high school students in 2018 wanted to enter universities to become financially successful and independent people [RIA Novosti: wciom, 2018]. According to the study by "Evrobarometr", as of April 2015 only 45% of the working population in Russia, having higher or incomplete higher education, have received additional professional education over the past five years [Avraamova et al., 2016, p. 9]. This percentage is almost twice lower among those having secondary or vocational secondary education. The comparative data analysis points at a low level of need for receiving new competences and at a low educational and professional mobility of people. Moreover, it gives indirect evidence that additional professional education is underrated as a subsystem of lifelong learning, connected to the economy to the utmost extent;

- between the tactical motives of corporate demand and strategic tasks for development of various sectors of the economy and the living environment of people. Due to the macroeconomic instability and uncertainty, the focus of interest in the sphere of personnel management shifts towards those educational programs that help employees solve operative and tactical development problems of an organization [Vocational education services market: assessment of employers, students and representatives of educational institutions, 2016, p. 3]. However, more serious consequences for further development of the economy and people are entailed by a similar gap in the size of demand for professional education on the part of enterprises being in

different economic situations. Research has identified that at successful enterprises competences are updated by a larger number of employees than it is really necessary, while the situation is the other way around at unsuccessful enterprises. It increases the risks of reproducing stagnation for quite a few enterprises, with many of them in the top-priority lines of development of the country's economy [Avraamova et al., 2016, p. 64-65].

The contradictions on the side of the supply of educational services are the same acute. Let us point out such as

- contradiction between different subsystems of lifelong professional education. The forms of its manifestation are quite diverse. Firstly, it is the presence of dead-end educational trajectories caused by the lack of integration of secondary and secondary vocational education into a single system with higher education. Today universities rarely cooperate with educational organizations of general additional education. Moreover, few of them plan to expand interaction with these organizations [Professional educational organizations and educational organizations of higher education in the educational services market, 2016, p. 18]. Secondly, it is inconsistency in the contents, methods and teaching techniques, preventing succession at all levels of professional education. This list can also be supplemented with agency-level segregation. Experts rightly notice that higher education in Russia is managed centrally, while secondary and general education is managed mostly at the regional level [Volkova, Koval, Mashukova, 2011, p. 96];

- contradiction between the high level of information asymmetry and the need to increase the transparency of educational environment. The asymmetry of information limits the capabilities of non-price competition on the market and stimulate unfavorable selection. So, without increasing the transparency of the market, it is impossible to enhance the efficiency of market-based incentives, including in terms of the quality of education;

- contradiction between the remaining traditional training system and the need to introduce modern multi-optional organization of the learning process, which should be built on the up-to-date information and technology base. The pedagogical process in most educational institutions is still built on the main principles of the traditional training system. On the other hand, the new external environment increases the diversity of educational needs. This situation, new for the majority of universities, is not always and fully understood by them.

There are contradictions at the level of supply and demand interaction in the system of lifelong professional learning. We refer the following to them

- contradictions in the cooperation of employers and educational institutions in the system of lifelong professional learning. In our opinion, there are at least three forms of their manifestation. The first one is, as we have already mentioned, a relatively low level of demand on the part of employers for educational services. The second one is a low activity of employers in the process of development of educational standards, quality assessment of the rendered services and participation in public accreditation. The third form is the most surprising. For example, companies' representatives take part in managing of only one out of five organizations of

professional education. At the same time, educational organizations themselves find it sufficient to maintain the existing type of cooperation with employers. Every four out of five organizations assess these relationships as not only sufficient, but efficient too. Educational organizations today suggest developing tangible forms of cooperation with companies and forms of stimulation of companies as customers of services, and involving companies in employment of graduates [Implementing professional education programs as assessed by the heads of professional educational organizations, 2017, p. 4]. As we can see the list lacks the most important forms of cooperation: participation of employers in the development of educational standards, quality assessment, certification of the rendered services, especially in the field of post-graduation education. In this situation there are inevitable contradictions between the competences offered by the system of professional education, and competences that the employer needs today and the essential mechanism of direct communication and feedback between the labor market and the educational services market fails to work.

Measures, necessary to solve contradictions, are quite diverse. So we will only point out the main principles for their selection. Firstly, it is differentiation by the reference to the main entities of the educational services market with an emphasis on the delegation of power to university associations and consolidated employers. Secondly, it is variability and strategic approach, ensuring that the best solutions are chosen within a certain time interval. Thirdly, it is provision of coordination with appropriate changes in other segments of the educational system on the basis of an increase in the competitiveness of every element and through continuity of the educational process.

CONCLUSION

So, the analysis of contradictions shows that the Russian system of lifelong professional learning is at the fragmented level of development and the market of its services has a large potential. In our opinion, the development prospects will depend, to a large degree, on the creation of an efficient mechanism of social partnership, an ability and wish of all stakeholders to coordinate their positions, and on the understanding of the idea that lifelong professional education is a vector of today's development of the national and international educational space. This will call for a period of open discussions about the goals, objectives and conditions for the practical implementation of the Russian system of lifelong professional learning and awareness-raising actions. They have already started [The project of the Concept for development of lifelong learning for adults in the Russian Federation for the period until the year 2025, 2015; Teslinov et al., 2014; Evzrezov, Mayer, 2012; Volkov et al., 2008]. In this respect, the authors of this paper pursue the goal of giving an impulse to further study and interpretation of a number of important problems of Russian lifelong professional learning.

References

- [1] A Memorandum on Lifelong Learning. Commission Staff Working Paper. Commission of the European Communities. Brussels. 30.10.2000

- (2000). Available at: <http://www.worldbank.org/kam>, last accessed 2018/04/22.
- [2] A bridge to the future: European policy for vocational education and training 2002-10. Luxembourg: Publications Office of the European Union (2010). Available at: <http://www.cedefop.europa.eu>, last accessed 2018/05/20.
- [3] A Civil Society View Adult Education in Europe 2017 – A Civil Society. In View European Association for the Education of Adults, 2017. European Association for the Education of Adults – EAEA European Association for the Education of Adults (EAEA), Brussels. Available at: <https://eaea.org/>, last accessed 2018/04/30.
- [4] A cluster model of innovative development of a university. Collective monograph. In Editor: E. Yurina/ Publishing house TSU named after G.R. Derzhavin, Tambov (2008). (In Russian).
- [5] Avraamova Y., Karavya A., Klyachko T., Loginov D. Monitoring of Professional Education: Positions of Employers and Employees. Delo, Russian Presidential Academy of National Economy and Public Administration Publ., Moscow (2016). (In Russian).
- [6] Evzrezov V., Mayer B.: Changes in system of the modern society and reform of higher education. Vestnik.nspu 6(10), pp. 37-42 (2012). Available at: <http://www.vestnik.nspu.ru>, last accessed 2018/05/19. (In Russian).
- [7] Cedefop (2016). Vocational education and training in the Netherlands: short description. Luxembourg: Publications Office. Cedefop information series. (2016). Available at: <http://dx.doi.org/10.2801/476727>, last accessed 2018/04/20.
- [8] Grillot A. Early leaving from vocational education and training France. Centre Inffo (2013). Available at: <http://www.cedefop.europa.eu/EN/Information-services/vet-in-europecountry-reports.aspx>, last accessed 2018/04/22.
- [9] Implementing professional education programs as assessed by the heads of professional educational organizations. Monitoring the economics of education, 5 (41) (2017). Available at: <http://www.memo.hse.ru/ind>, last accessed 2018/05/20. (In Russian).
- [10] Koukku A. , Kyrö M. Early leaving from vocational education and training Finland. FNBE (2014). Available at: <http://www.cedefop.europa.eu/EN/Information-services/vet-in-europecountry-reports.aspx>, last accessed 2018/04/18.
- [11] Mathou C. Country report Belgium-French 2016 update to the European inventory on validation of non-formal and informal learning (2016). Available at: <http://www.cedefop.europa.eu>, last accessed 2018/04/18.
- [12] Professional educational organizations and educational organizations of higher education in the educational services market. Monitoring the economics of education, 1 (100) (2016) . Available at: <http://www.memo.hse.ru/ind>, last accessed 2018/05/20. (In Russian).
- [13] Pugach V., Vorozheikina O. , Zhukovskaya M. A dictionary of consistent terms and definitions in the sphere of education of the countries members to the commonwealth of independent states. In Editor: N.A. Selezneva. NITU "MISiS", Moscow (2012). (In Russian).
- [14] RIA Novosti: wciom : 71 percent of high school students of the Russian Federation seeking to enter higher education. Available at: <http://www.wciom.ru>, last accessed 2018/05/07. (In Russian).
- [15] Skolverket, ReferNet Sweden. (2016). Vocational education and training in Europe – Sweden. Cedefop ReferNet VET in Europe reports). Available at: https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_CR_SE.pdf, last accessed 2018/04/20.
- [16] Shkarlupina G.: Educational services and legal standards. Law and education 1, pp. 71-81 (2009). (In Russian).
- [17] Starodubtsev V., Shepel O., Kiseleva A.: Specifics of the modern educational process. Higher education in Russia 8-9, pp. 67-73 (2011). (In Russian).
- [18] Teslinov A., Bezlepkin V., Petrov V., Schennikov S. Substantiating the Russian concept of lifelong learning for adults. MIM LINK, Zhukovsky (2014). (In Russian).
- [19] Tissot F.: Terminology of vocational training policy (A multilingual glossary for an enlarged Europe). European Centre for the Development of Vocational Training (Cedefop) (2004). Available at: [http://www.etf.europa.eu/webatt.nsf/0/C12578310056925BC125716B004F1C7B/\\$file/NOTE6PPJVV.pdf](http://www.etf.europa.eu/webatt.nsf/0/C12578310056925BC125716B004F1C7B/$file/NOTE6PPJVV.pdf), last accessed 2018/04/30.
- [20] The project of the Concept for development of lifelong learning for adults in the Russian Federation for the period until the year 2025. Moscow (2015/09/28). Available at: http://www.dpo-edu.ru/?page_id=13095, last accessed 2018/04/27. (In Russian).
- [21] UNESCO Institute for Lifelong Learning Collection of Lifelong Learning Policies and Strategies (2015). Available at: <http://uil.unesco.org/lifelong-learning/lifelong-learning-policies-database/collection-lifelong-learning-policies-and>, last accessed 2018/04/25.
- [22] UNESCO Institute for Lifelong Learning Global Report on Adult Learning and Education (2009). Available at: http://uil.unesco.org/fileadmin/keydocuments/AdultEducation/en/GRALE_en.pdf, last accessed 2018/04/25.
- [23] Vocational education services market: assessment of employers, students and representatives of educational institutions. Monitoring the economics of education, 17 (2016). Available at: <http://www.memo.hse.ru/ind>, last accessed 2018/05/20. (In Russian).
- [24] Volkova I., Koval E., Mashukova N. Directions to improve the development of continuing professional education on the best practice basis. Vestnik Belogorskogo state University, series “ Economy”, “Informatics”19 (144), pp. 93-99 (2011). (In Russian).
- [25] Volkov A, Kuzminov J, Remorenko I, Rudnik B, Frumin I, Yakobson L. Russian education – 2020: model of education for innovate economy. Educational Studies Moscow 1, pp. 32-64 (2008). (In Russian).