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STAFF FOR DIGITAL ECONOMY: TRANSPROFESSIONALISM FORMATION

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Abstract

Peculiarity of modern economy development are volatility, uncertainty, acceleration of changes, steady instability of social and professional processes. The innovative direction of scientific and technical development of the Russian Federation is digitalization of activity space of a modern person and its particular manifestation is digital economy. At the same time the modern economy has acute shortage of staff which could become a support in the course of digital economy formation in Russia. As one of factors of successful introduction of digital economy, flexible orientation of a personality in the digital professional world is the formation of staff transprofessionalism. In the article the problem of definition of the role and strategy of transprofessionalism formation at staff to set digital economy in Russia. To solve this problem a heuristic model of transprofessionalism formation at staff for digital economy including the basic grounds and environmental descriptors of transprofessionalism is developed. Basic elements are in continuous interaction and interference. Environmental descriptors show various external manifestations of staff transprofessionalism. The model includes a set of elements which are connected with each other in the horizontal and vertical way. The heuristic model provides the possibility to carry out probability calculation (on the basis of diagnostic indicators), several options of assumptions in connection with a set of elements that allows to predict, investigate and develop technologies of transprofessionalism formation at staff in the conditions of transition to digital economy.

Keywords: Digital economy, transprofessionalism, heuristic model of transprofessionalism formation.

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1. Introduction

In 2016 the digital economy is announced to be an innovative direction of scientific and technical development of the Russian Federation. It is noted that the opportunities "the economic growth of Russia based on extensive usage of network resources against the background of digital economy formation and emergence … the countries having new production technologies" are exhausted (The decree of the Russian President "About the Strategy of scientific and technological development of the Russian Federation No. 642 from 12/1/2016), and the economy needs a new round of development. Digital economy is an economic activity in which a key factor of production are data in a digital form, processing of large volumes and the use of which analysis results in comparison with traditional forms of managing allow to increase significantly the efficiency of different types of production, technologies, equipment, storage, sale, delivery of goods and services (Introduction to "Digital" economy, 2017). Thus, the idea of changing the social way, the development of digital economy and digitalization of all life of human society meaning-making predictor which is the convergence of the most breakthrough technologies is postulated. The increasing speed of spreading the technologies of virtual and alternate reality acts as a megatrend of changes of social and professional scenery (Strauss & Howe, 1991). Similar changes will inevitably lead to the change of nature of person activity namely the majority of processes will be transferred into online ones, there will be a transformation of production branches and professions, all-round use of digital technologies and change of person mentality under their influence. The information and communication environment involving him influences on the content of his mental development – forms and ways of development, the zone of the further development, kinds of activity, ways of dealing difficult life situations. It leads to refusal from former and to creation of the new relations with the social environment including professional (Soldatova, Rasskazova, & Nestik, 2017).

The following factors act as the main trends of the development of personnel potential of digital economy:

- developing economy forms the order for training personnel possessing the set of diverse competences namely basic (universal), professional and variable;
- overcoming crisis situations of organizations development causes the need in experts having multidimensional, transprofessinal competences (Malinovsky, 2007);
- the approval of command style of engaging management forms the need for the experts combining multidimensional competences, having broad social and professional outlook, so-called "People-X" (Program People-X, 2017).

In 2017 the Government of the Russian Federation has developed and approved the program for creation of conditions for transition of the country to digital economy within which the work on the "Personnel and Education" direction was started (Order of the Government of the Russian Federation, 2017). Experts note that the modern economy has acute shortage of personnel that could become a support in the course of digital economy formation in Russia. At the same time, it is not only about the personnel owning digital technologies but also about ordinary users. Economy digitalization goes side-by-side with the digitalization of personality activity space and that generates urgent need in mastering digital competences by the population. Besides, the majority of modern professions, considering accelerated scientific and technical development of the country, in the near future will endure digital

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transformation (addition with digital components) that will demand from personnel corresponding abilities, skills. At the same time, the digital economy is disabled without simultaneous digitalization of society, business and government therefore its development is in acceleration of processes of the penetration of digital relations into all levels of interaction of its participants – from state to personal (Makhalin & Makhalina, 2017).

One of the factors of successful digital economy introduction, mastering digital competences by the population, flexible orientation of the personality in the digital professional world is transprofessionalism formation (Perkin, 1996) that is qualitatively new qualification characteristic of activity subjects.

Transprofessionalism is a simultaneous coexistence and combination of several forms of professional qualifications being acquired on individual educational ways in the first and additional professional education and throughout all professional life of the person (Zeer & Krezhevskikh, 2018; Zeer & Symaniuk, 2017). It doesn't deny the importance of initial, basic profession, and come beyond its borders, enriches it with knowledge, competences and technologies from other professional types of activity. The need of emergence of this form of professionalism as noted by Racko, Oborn, & Barrett (2017), Horsburgh, Lamdin, & Williamson (2001), etc. is caused by the logic of post-industrial society development: fast change of technological ways, intensive development of information technology demand from the expert to expand the range of professional knowledge, flexibility, ability to adapt quickly to the changing conditions of the professional environment and skills to work in a team.

Formation of transprofessional competences will promote the development of the following characteristics of experts of the future:

- psychological flexibility, social and professional mobility, psychological resistance to uncertainty;
- digital competence and media competence and their components – digital literacy and media literacy;
- "acute" educational competences (Dorozhkin, Zeer, & Shevchenko, 2017).

Multidimensional competences and metaprofessional qualities of the personality act as a thematic core of transprofessionalism. Additional education when forming transprofessionalism becomes particularly important, the effective form of this education are minors and media - information competence, expanding social and professional opportunities of experts (Feynberg, 2017). Harden (1998) considers multiprofessionalism, interprofessionalism as steps of transvocational education. Harden (1998) emphasizes that transvocational education is effective while meeting a number of conditions, namely: optimum compliance of education format, level of education and category of students, clear idea of training results, consideration of transprofessional education as a multistage process.

2. Problem Statement

The research problem is determined by the following contradictions:

- In the modern professional world there is a demand in transprofessional staff that are capable to adapt flexibly to quickly changing conditions of professional activity and to work effectively in the conditions of professional multitasking. At the same time there are no scientific research

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results directed to the research of methods and technologies of transprofessionalism formation at people of different professions.

- The course taken by Russia on digital economy defines the relevance of training, capable to handle freely with digital technologies and to be successful in conditions of space digitalization. The digital competence of a person is inconceivable without the created digital literacy which is understood as readiness and ability of the personality to apply digital technologies crucially, masterfully, effectively and safely in all spheres of activity (Kondakov, 2018). At the same time modern professional education doesn't consider these tendencies, that is why the introduced digital economy experiences an urgent need for modernization of professional -educational preparation according to digital challenges of reality.

Due to the designated contradictions, the problem of the research consists in definition of the role and the strategy of transprofessionalism formation at staff to form digital economy in Russia.

3. Research Questions

Today the phenomenon of transprofessionalism is insufficiently developed. Both in foreign and in domestic psychology there is a wide range of issues that need a solution:

- there is no exact definition of the concept "transprofessionalism", there is no exact delimitation of this concept from the others, in particular, such as "polyprofessionalism", "interprofessionalism", "multiprofessionalism" and etc. (Barr, 2002);
- the complete concept of transprofessionalism isn't worked out, the majority of articles just specify the relevance of studying this problem;
- there are no diagnostic tools allowing to measure the degree of transprofessional competences formation and personality transprofessionalism in general;
- practically there are no researches devoted to the formation of transprofessionalism at various professional groups.

Digitalization of all spheres of activity of a modern person generates the need to solve the following questions:

- definition of conditions of digital and transprofessional competences formation at staff and also the solution of the problem of these competences correlation;

development of technologies of transprofessionalism formation at staff (in the course of professional and educational preparation and at a stage of independent professional activity) taking into account tendencies of digitalization of space.

4. Purpose of the Study

Research objective: the development of heuristic model of transprofessionalism formation at staff for digital economy. Achievement of the goal assumes: definition of the basic grounds and environmental descriptors of personality transprofessionalism, correlation of model contents with the conditions of digital future.

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5. Research Methods

In the research the following methods are used: theoretical (analysis; synthesis; specification; generalization); hypothetico-deductive; heuristic. Creation of heuristic model of transprofessionalism formation at staff for digital economy (figure 01) took place on the basis of multidimensional, system and process approaches.

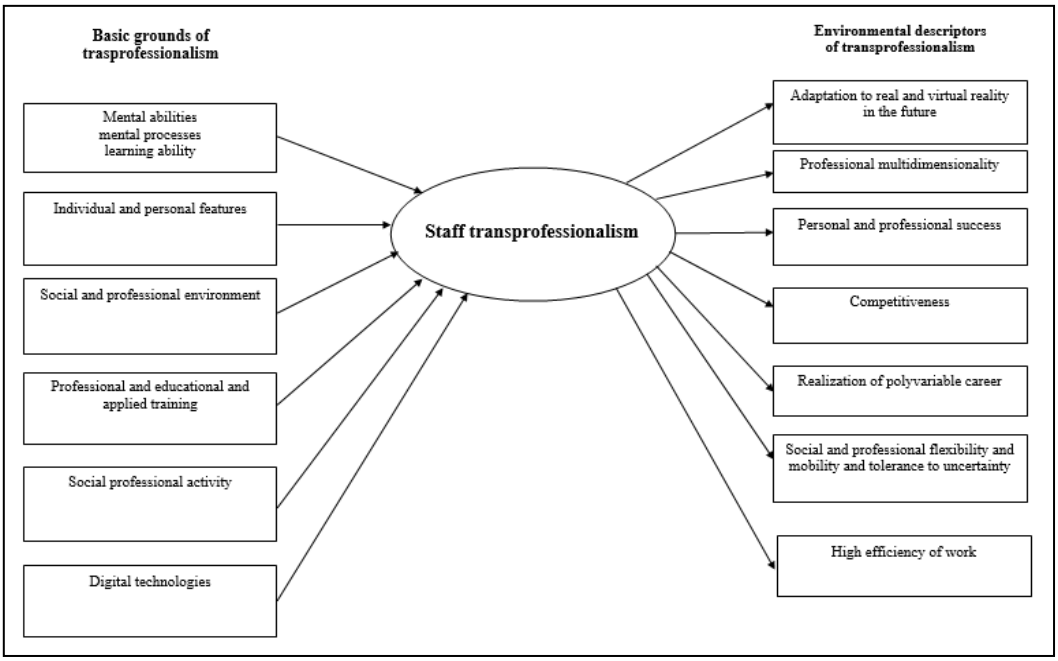

Figure 01. Heuristic model of staff trasprofessionalism

6. Findings

The heuristic model of transprofessionalism formation at staff for digital economy possesses the following characteristics Amosov's (1979) approach:

- Basic elements are in continuous interaction and interference.
- Environmental descriptors show various external manifestations of transprofessionalism at staff.
- The model includes a great number of elements.
- Elements of model are connected with each other in the horizontal and vertical plan.
- The heuristic model provides the possibility to carry out probabilistic calculations (on the basis of diagnostic indicators), several options of assumptions in connection with a set of elements.
- The model allows to predict, investigate and develop technologies of transprofessionalism formation at staff in the conditions of transition to digital economy.
- Interference and interaction is characteristic of model elements. In the interacting correlating set the elements of the basic grounds define the transprofessionalism formation of the personality which is shown in environmental descriptors.

The conditions dictated by digital economy and digitalization of activity of the personality are considered in the basic grounds of transprofessionalism and are included in each element. For example: the formation of individual and personal features takes place under the influence of digital technologies

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used in the development of the personality; the social environment means mediation of interactions, communication, also in the family, by digital technologies; professional -educational and applied training goes on with the use of digital technologies in these processes; independent professional activity means active development both digital elements included in it, as well as the adaptation to the changing requirements to workers in the conditions of digitalization.

7. Conclusion

One of the factors of successful introduction of digital economy, mastering of digital competences by the population of the country, flexible orientation of the personality in the digital professional world is transprofessionalism formation at staff.

The developed heuristic model of transprofessionalism formation at staff for digital economy is based on multidimensional, system and process approach. The basic grounds of transprofessionalism (mental abilities, learning ability, individual and personal features, social environment, professional and educational and applied training, professional activity, technological development) are in continuous interaction and interference, and environmental descriptors (adaptation to reality and the future, professional multidimensionality, personal and professional success, competitiveness, realization of polyvariable career, social and professional flexibility and mobility, high level of professional skill and high labor productivity level) show various external manifestations of transprofessionalism at staff. The conditions dictated by digital economy and digitalization of activity of the personality are considered in the basic grounds of transprofessionalism and are included in each element. The presented heuristic model provides the possibility of carry out probabilistic calculations (on the basis of diagnostic indicators), several options of assumptions in connection with a set of elements on the basis of which, at adequate selection of diagnostic tools, it can be applied for the purpose of determination of the level of formation of transprofessionalism at staff. In addition, the results of the research can be used when organizing the process of vocational training of personnel for digital economy of Russia.

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