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Transprofessionalism of the Subjects of Professional Activity: Prolegomena, Platform, Formation

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Abstract: The relevance of the issue under study is determined by the socio-technological development of the Russian economy where the very notion of profession has lost its initial meaning as an area of social division of labour whereas competitive and sought-after specialists now are transprofessionals, capable of performing a wide range of specialized types of professional activity. The objective of the paper is to describe the phenomenon of transprofessionalism to determine the initial attributes for its understanding and to present a block model of a platform for transprofessional formation. The leading research methods are theoretical (analysis, synthesis, specification, generalization), hypothetico-deductive and project-based. The model of transprofessionalism formation platform was built on the basis of a multi-dimensional, network and process approaches. The paper presents the main arguments which formulate the concept and give preliminary information on the phenomenon of transprofessionalism and on the model of the vocational educational platform for its formation in the subjects of professional activity. The materials of the study can be useful for teachers of the vocational education system, implementing professional training of future specialists.

Key words: Transprofessionalism, subject of professional activity, vocational educational platform, relevance, approaches, education

INTRODUCTION

The world of professions changed considerably in the post-industrial society, becoming more dynamic, vague and unpredictable. Some professions vanish, others are transformed and still others emerge for the first time. These changes are conditioned by the socio-technological development of the economy the very notion of profession has lost its initial meaning as an area of social division of labour which was essentially characterized by a system-based clearness, specific forms and types of actions (activity) and by accomplished result (Lombard and Ditton, 1997).

The notions of 'profession', 'professional activity' and 'occupation' are widely used in profession studies. Alongside with these well-established concepts a new term 'transfession' has been accepted in the recent years in profession studies as a type of labour activity implemented on the basis of synthesis convergence professional competences of from different specialized areas. The theoretical basis of transfession is multidimensionality which presupposes a transdisciplinary synthesis of knowledge from different sciences: natural, technical, social, humanitarian and philosophical.

Transfessions have a network structure and possess a universal qualification description due to using convergent technologies from different occupational areas. A subject-matter core of transfession is transfessionalism an ability to perform a wide range of specialized types of activity. Social and humanitarian technologies determine the transfessionalism in the socionomic group of the profession, the thematic core of which are soft skills: adaptability, attractiveness, mobility, tolerance, self-confidence (Efimova, 2016; Davydova *et al.*, 2016a, b).

Transprofessionalism formation in subjects of socionomic types of activity determines its special relevance. The representatives of humanitarian professions should possess broad knowledge and competences from different professional areas, in other words, they should become transprofessionals to be successful.

Requirements to a modern professional are presented in the theory by Perkin (1996) who specified three professional revolutions. According to Perkin, specialists in particular professions are replaced by the specialists willing and able to work in the inter-professional environment. These socio-technological transformations condition the necessity of transprofessionalism formation,

a breakthrough qualification description of the subjects of activity. Its sense-forming predictor is a convergence of the latest breakthrough technologies: nanotechnology, biotechnology, information technology and cognitive sciences. Kovalchuk (2011) included one more point in this list socio-humanitarian technology comprising social, anthropological and philosophical components.

Characterizing the globalization process as a civilizational phenomenon, Malinovskiy (2017) talks about the 'transprofessional challenges': following the phenomenon of 'paraprofessionalism' implying "the transformation of professional standards into an image of everyday life and activity through the spreading of standard and universal technologies".

Analyzing works on the issue (Harden, 1998; Horsburgh *et al.*, 2001) enabled the researchers to enrich the scientific understanding of transprofessionalism. With the emergence of specialists focused on the development of universal cross-cutting competencies, one can observe the emergence of 'transprofessionals' whose qualifications are based on the development of new key competencies that allow finding complex and unique solutions based on the transdisciplinary synthesis of knowledge and inter-professional communication.

Transprofessionalism is a challenge to traditional understanding of expertise and qualification. This phenomenon manifests itself in polyprofessionalism the use of convergent technologies, the mastering and implementation of not only related but also completely different professions and the readiness to go beyond the framework of the formed experience; only in this case the specialist is ready to meet the social and professional innovations of the future.

It should be especially, emphasized that transprofesionalism in no way renounces the value of the basic profession but encourages to go beyond, to enrich it with knowledge, competences and technologies from other types professional of activity.

Thus, transprofessionalism is the co-existence and combination of several types of professional qualifications acquired on individual educational trajectories in basic and additional vocational education and also throughout the professional life of the subject.

MATERIALS AND METHODS

The following methods were used in the research: analysis, synthesis, specification, generalization, hypothetico-deductive and project-based. The model of transprofessionalism formation platform was built on the basis of a multi-dimensional, network and process approaches.

Experimental facilities of the research: Experimental facility of the research was Russian State Vocational Pedagogical University.

Research stages: On the second stage, the experimental and searching activities were conducted, the results were analyzed, generalized and systematized in form of the model of vocational educational platform for transprofessionalism formation. The study was carried out in two stages:

At the first stage, a theoretical analysis of the scientific literature on the issue in question was carried out, the phenomenon of 'transprofessionalism' was specified, the purpose and methods were identified and a study plan was designed.

At the second stage, pilot work was effectuated; its results were analyzed, summarized and systematized in the form of a model of a vocational educational platform for transprofessionalism formation.

RESULTS AND DISCUSSION

The objective was to study transprofessionalism of professional activity subjects. To solve the issue of transprofessionalism formation, a logical-semantic model of transprofessionalism was built.

During the recent years the concept of technologies convergence on inter-disciplinary basis has been recognized in social and humanitarian sciences. This viewpoint is based on the integration of heterogeneous and multidirectional properties, subjects and phenomena. The methodological foundation of transprofessionalism components convergence is a multidimensional approach (Yalalov, 2013) and a conceptual model of transprofessionalism is the form of reflecting these sense-forming components. For the socionomic group of professions the instrumental components of transprofessionalism are as follows:

- Transprofessional orientation
- Regulatory component
- Vocational educational component
- Information and communication component
- Humanitarian and technological component

Transprofessional orientation serves as a senseforming factor which determines the multidimensionality of the subject of professional activity. It implies focusing on the implementation of a wide range of activities, willingness to master the diverse professional functions, the ability to simultaneously perform several types of information and communication technologies. Theoretical analysis of the professional multidimensionality of specialists enabled to distinguish the following constructs: the 'I' concept, social-professional adaptability, multidimensional identity, transfessional values and motivation.

The regulatory component of a subject of professional activity conditions their psychological resource and is characterized by the level of developed abilities for planning, designing, forecasting and evaluating the activity results. Basically, regulation is a mechanism for mobilizing the socio-professional resources of the subject of activity; a conscious self-regulation of a specialist's voluntary activity is important in realization of this component. The regulatory predictors of such activity include self-organization, self-actualization, self-efficacy, independence, control of mental state, etc.

The vocational educational component conditions the formation of a multidimensional specialist and is based on competence. The result is interdisciplinary expertise, key (hard, soft and digital skills) competences and meta-professional strengths. The information and communication component reflects the capability of a specialist to navigate in the information inter-professional environment as well as in virtual reality. The constructs of this component include socio-communicative mobility, professional mobility, tolerance for uncertainty, reflexivity, perceptual adequacy (self-competence), etc.

The humanitarian and technological component integrates social and humanitarian technologies and represents the convergence of knowledge and technologies from many professional areas. The variability of these technologies allows designing individual trajectories of the transprofessional development of the subjects of labor. The constructs of this component include transdisciplinary knowledge, socio-cultural competence, social intelligence, cognitive abilities and reflexive evaluation.

A presumable conceptual model of transprofessionalism of the subjects of professional activity is given in Fig. 1. The space between the conceptual coordinates forms inter-coordinate relations of predictors located on the coordinate axis (Fig. 1).

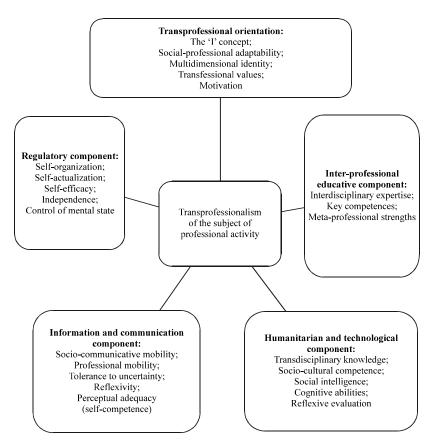


Fig. 1: Conceptual model of transprofessionalism of the subjects of professional activity

The inter-coordinate space forms a psychological potential of a person, its resource capabilities. Personal components determine the area for potential development; the intensity of a specific component ensures different configuration of the personal space. Actualization of one or several personal components launches the mechanism of implementing the entire potential of a person. Taking into account the heterochrony of the development of personal structural components, one should assume that depending on the social and psychological situation on the age and psycho-physiological features certain components become dominating and thus determine the entire development of a person (Harre, 1983).

Depending on the heuristic orientation of the conceptual model, other components can be introduced: social-professional resource, social-professional self-determination, innovation engineering, forecasting professional future, etc.

The conceptual model of transprofessionalism becomes the empirical basis for designing a vocational educational platform for transprofessionalism formation in the subjects of professional activity.

The aim of the platform is an integration of vocational educational knowledge, skills and competences into transprofessionalism of the subjects of professional activity. The objectives of the platform are as follows:

- Actualization of student's professional potential and the enrichment of their professional consciousness
- Formation of the psychological and pedagogical expertise, additional competences and multidimensional socio-psychological features
- Development of the research and methodological support: educational programmes, technologies for their implementation, maintenance of the educational process, diagnostics of the academic and professional achievements; assessment of the education results
- Formation of the person's transprofessionalism willingness and ability to master and perform a wide range of functions and types of professional activity

The fundamental concept of the platform is research and methodological support of the innovative content of education, selection of efficient educational technologies, navigation aids for the academic process and tools of assessment of the student's achievements.

The scientific substantiation of the platform design and the technologies for its implementation relied on the concept of professional development of the individual and the following methodological approaches: network (multidimensional), process and project. The study of vocational education methodology enabled to determine particular principles of the platform design:

- Unity of the personal and professional self-determination
- Professional orientation of the content and the technology of education
- Integration of socio-professional and psychological-pedagogical components of the educational activity
- Co-development of personal, educational and professional activity of students
- Variation of the educational content determining the individual educational paths
- Interlinking of professional and educational standards with the psychological and pedagogical functions of continuous professional education
- Focus of the content and educational technologies of the platform on expanding professional capabilities of students and on the development of their transprofessionalism

The platform design considered the modernization trends for the system of continuous professional education and the relevant problems of the present-day educational situation in vocational school (Zeer, 2013; Solodova, 2014; Davydova *et al.*, 2016a, b).

The structural organization of the platform is in the form of block-modular integration of the education content. The modular technology allows taking into account the trend for education content integration as well as education differentiation on the basis of student's individual requests. It is reasonable to use short modules, each devoted to the formation of one or two competences. This platform implementation allows the students to individualize their educational route (Konanchuk, 2013). The aggregate of conceptual provisions, methodological approaches and principles determined the prospect of designing the psychological-pedagogical platform.

The information and educational content of the platform consists of four blocks: basic (invariant), consolidating the psychological and pedagogical competence of the individual in conditions of uncertain educational environment; profession-oriented, forming multidimensional educational developmental and competencies; functional, implementing alternative modules focused on highly demanded types of professional activity; instrumental, integrating psychological knowledge, skills and competencies in practice.

Each block includes one or several modules: the basic block is focused on actualizing psychological and pedagogical potential, on motivation and correction of the initial level of professional and psychological expertise. Manufacturing and technological training characterizes the ability of students to perform labour activities within generalized labour functions of a specific job.

The profession-oriented block includes two alternative modules (methodological and technological) focused on the formation of non-technical competences and on the development of cognitive, information-communication and technological (project) abilities.

The functional block is focused on integrating psychological and special competences into profession-oriented types of professional activity, this block consists of the modules relevant to the types of professional activity.

The instrumental block consists of special modules according to the sectorial types of professional activity and is aimed at integrating the educational content of previous modules into professional practice.

The final assessment of results of the educational platform is provided by monitoring the results and is based on expert evaluation. The project options are selected depending on the projected professional activity (Fig. 2).

The block-modular structure of the platform allows building different options of educational programmes depending on the level of education received and on the type of professional activity projected.

The implementation of educational programs can be carried out in the mode of full-time, correspondence and

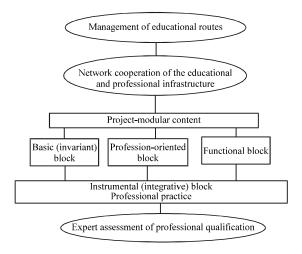


Fig. 2: Model of the professional-educational platform for transprofessionalism formation in the subjects of professional activity

distance learning which determine the possibility of high independence and co-organization in time of all platform components.

The platform implementation ensures projecting variable educational programmes for different profession-oriented groups of students. In order to implement them the entirely new approaches to making educational materials and new educational disciplines and courses complying with the requirements of higher education are required.

A highly promising innovation in implementing the technological platform are the minors the technologies for amplifying a person's psychological and pedagogical qualification, the expansion of their social and professional competence and the actualization of self-development and self-regulation of professional activity. The following minors are possible within the frameworks of a technological platform of professional education:

- Actualization of professional-personal potential including three modules:
 - Developing psychodiagnostics
 - Technologies for enriching the professional abilities
 - Forecasting professional future (Zavodtchikov, 2013; Yurevich, 2008)
- Professional and pedagogic technologies including four modules:
 - Fundamentals of professiology
 - Psychology of professional development
 - Interactive education technologies
 - Career navigation
- Self-determination in the present-day conflicting realities including three modules:
 - Network structures of conflicting realities
 - Technologies for formation of the 'parallel reality'
 - Overcoming destructive influence of the youth subculture, etc.

The minors can be offered to students as supplementary education programmes as well as to teachers of vocational schools.

The target orientation of the platform is forming psychological and professional competence, developing multidimensional socio-technological competences and self-development and self-actualization. The minors are focused on the development of professional qualities of the individual: socio-professional dynamism, prognostic abilities, preparedness for innovation, social and professional mobility and above-limit socio-professional activity.

The assertions of the VI technological order of economic development result in the emergence of a number of new professions, mastering which creates a fundamentally new qualification characteristic for a person: the ability to master perform new types of professional activity. Achieving this target orientation provides for the formation of a new type of professionalism transprofessionalism, readiness for inter-professional communication and a transdisciplinary synthesis of knowledge. Transprofessionals possess high learning ability, innovativeness, ability to self-development and self-actualization, overcoming previous experience stereotypes.

The methodological basis of transprofessionalism is professional multidimensionality the ability to perform several types of professional activity.

Professional multidimensionality is realized by the following meta-competences: multi-functionality, virtual mobility and synergism (Yalalov, 2013; Amirova, 2006; Mishchenko, 2009; Zeyer *et al.*, 2011; Zeyer and Symanyuk, 2016).

Structural-functional composition of the platform provides an alternative possibility for its implementation depending on the basic education and goal orientation of students at specific types of professional activity.

The choice of an educational route is also determined by the level of professional education being obtained: secondary, higher (Bachelor's programme, Master's programme) and supplementary.

Highly important for the platform implementation is the instrumental block integrating the educational content of the programmes from previous modules in the process of professional practice which can take place in designated organizations as well as on specially created probation sites.

It seems promising to use the platforms for vocational training of tutors with a secondary vocational education and teachers of general technical disciplines with a higher industry-based education. Such method of training teachers of continuous professional education shows potential for high-tech occupations.

Implementing the platform project is possible provided the disciplines of the modules are equipped with necessary academic materials and textbooks in electronic format.

CONCLUSION

A strategic focus of the platform is the development and self-development of professional potential and the formation of transprofessionalism of the subject of professional activity. The applied focus of the project consists in the following:

- Assistance to the development of transprofessionalism of the subject of professional activity
- Formation of professional skills: non-technical, professional and development competences
- Research and methodological support of professional education and personal-professional development of the subject
- Integration of the vocational and non-system education into the comprehensive pedagogic activity
- Projecting of individual educational routes and predicting student's professional future

fundamental changes of To sum up, socio-cultural and technological environment professional school induce to search for a totally new methodology of a network education focused on development of 'a person of the future'. The vocational educational platform will ensure development of a multidimensional professional. In order to fulfill one's potential in the system of a networking cooperation of science, education and manufacture the subject of professional activity is to be able to perform different professional functions at high level. The purposeful formation of such specialist is possible upon the fulfillment of network, process and project-based approaches. The basis for training is multidimensional competences the so-called crucial meta-professional advantages (Yalalov, 2013). These include: socioprofessional and virtual mobility; communicativeness; practical intelligence; responsibility; collectivism; working capacity; employee loyalty, focus on innovation, etc. In the post-industrial society a person themselves act as a qualification profile.

In conclusion it should be emphasized the paper presents a foresight-project of modernizing the practice of professional staff training existing in the country. The system-forming factor of the project is a professional educational platform, coupled with industrial and technological (industry) training. Integration of scientific and applied disciplines of the platform is carried out when developing didactic-oriented mini-projects. Sense-forming concept of the platform is the transprofessionalism of the teacher in vocational and pedagogical education.

The provided vocational educational platform does not cover all the aspects of the rapid development of professional education. Some statements are debatable; others require a comprehensive analysis while still others need expert assessment.

IMPLEMENTATIONS

The study describes the phenomenon of transprofessionalism. It is noted that nowadays the existing practice of professional staff training requires

modernization; for that it is proposed to implement the elaborated vocational educational platform with due account for skills profile. The materials of the study can be useful for teachers of vocational education for training future specialists.

REFERENCES

- Amirova, L.A., 2006. Development of the Professional Teacher's Mobility in the Space of their Self-Realization. Eastern University, Ufa, Russia, Pages: 460.
- Davydova, N.N., E.M. Dorozhkin and V.A. Fedorov, 2016a. Innovative process development in the framework of scientific educational network: Management model. Econ. Manage., 5: 157-163.
- Davydova, N.N., E.M. Dorozhkin and N.V. Polyanskova, 2016b. Formation of a cluster integration system of educational institutions within the Region. Intl. J. Environ. Sci. Educ., 11: 9206-9221.
- Efimova, S.A., 2016. [Academic and professional qualifications of graduates of the system of secondary vocational education (In Russian)]. Educ. Sci. J., 5: 68-82.
- Harden, R.M., 1998. AMEE guide No. 12: Multiprofessional education; Part 1-effective multiprofessional education; A three-dimensional perspective. Med. Teach., 20: 402-408.
- Harre, R., 1983. Personal Being: A Theory for Individual Psychology. Wiley-Blackwell, Hoboken, New Jersey, USA., ISBN:9780631133186, Pages: 299.
- Horsburgh, M., R. Lamdin and E. Williamson, 2001. Multiprofessional learning: The attitudes of medical, nursing and pharmacy students to shared learning. Med. Educ., 35: 876-883.
- Konanchuk, D.S., 2013. [EdTech: New technological platform in education (In Russian)]. Universitetskoye Obrazovaniye Praktika I Analiz, 5: 65-73.
- Kovalchuk, M.V., 2011. [Science and Life: My Convergence]. Akademkniga Publisher, Moscow, Russia, Pages: 222 (In Russian).

- Lombard, M. and T. Ditton, 1997. At the heart of it all: The concept of presence. J. Computer-Mediated Commun., Vol. 3, No. 2. 10.1111/j.1083-6101.1997. tb00072.x.
- Malinovskiy, V.P., 2017. [Challenges of the global professional revolution at the turn of Millennium (In Russian)]. Rossiyskoye Ekspertnoye Obozreniye, 3: 21-24.
- Mishchenko, V.A., 2009. [Professional mobility as one of the main psychological and pedagogical qualities of the future specialist (In Russian)]. Obrazovaniye i nauka Izvestiya UrO RAO., 3: 35-42.
- Perkin, G., 1996. The Third Revolution: Professional Society in International Perspective. Routledge, Abingdon, England, UK., Pages: 272.
- Solodova, Y.A., 2014. The methodology of students' synergetic world outlook development based on the trans-disciplinary approach. Educ. Sci., 2: 4-20.
- Yalalov, F.G., 2013. [Professional Multidimensionality (In Russian)]. Tsentr Innovatsionnykh Tekhnologiy Publisher, Kazan, Russia, Pages: 180.
- Yurevich, A.V., 2008. [Asymmetrical future (In Russian)]. Vopr. Filosofii, 7: 76-89.
- Zavodtchikov, D.P., 2013. [Spatial and temporal characteristics of personal self-realization in vocational educational environment: Theoretical methodological prerequisites (In Russian)]. Educ. Sci. J., 1: 14-25.
- Zeer, E.F., 2013. Controversial aspects of innovative trends of vocational pedagogic education. Educ. Sci. J., 5: 67-83.
- Zeyer E.F. and E.E. Symanyuk, 2016. [Foresight-project psychological and pedagogical educational platform of the teachers of professional school (In Russian)]. Nauchnyy Dialog, 11: 387-399.
- Zeyer, E.F., S.A. Morozova and E.E. Symanyuk, 2011. [Professional mobility-an integral feature of the subject of innovative activity (In Russian)]. Pedagogicheskoye Obrazovaniye v Rossii, 5: 90-97.