

www.europeanproceedings.com

DOI: 10.15405/epsbs.2020.12.04.59

# **ISMGE 2020**

# II International Scientific and Practical Conference "Individual and Society in the Modern Geopolitical Environment"

# CONTINUING EDUCATION ENVIRONMENT IN DEVELOPING STUDENTS' EDUCATIONAL ABILITIES

Dmitry Legenchuk (a), Andrey Korobchenko (b), Nadezhda Karelina (c), Elena Tazetdinova (d), Alexander Tymoshenko (e), Mariam Arpentieva (f)\* \*Corresponding author

(a) Kurgan State University, 62, Proletarskaya str.,Kurgan, 640020, Russian Federation
(b) Irkutsk State Transport University, 15, Chernyshevskiy str., Irkutsk, 664074, Russian Federation
(c) Irkutsk Aviation College, 5a, Lenin str., Irkutsk, 664025, Russian Federation
(d) Irkutsk College of Economics, Service and Tourism, 50, Bagration Str., Irkutsk, 664049, Russian Federation
(e) Irkutsk State University, 1, K Marx str., Irkutsk, 664003, Russian Federation
(f) Tsiolkovskiy Kaluga State University, 26, Razin str., Kaluga, 248023, Russian Federation

### Abstract

The identification of educational and other creative and special abilities of students and their proper development are the most important pedagogical tasks that require special attention, special solutions and approaches. To bring productive results, educators and scientists need to pay attention to pedagogical conditions. It is the conditions of pedagogical and educational activity that organize the systematic and planned activities. The article discusses the pedagogical conditions contributing the development of educational abilities of students, as well as the development of students' abilities associated with their preparation for the actual technological activity and design. The conditions of education should be such that they can contribute to the renewal and reform of modern education in Russia: both in preparing students in engineering and technical universities, and in training students in humanitarian universities. The authors analyse the pedagogical conditions to expand the content developed by D.V. Legenchuk concept of continuity of secondary vocational and higher education. In this model, the essential components of general secondary education are combined, including in the preparation of future designers, as well as technology and design teachers. The combination of secondary education in the direction of specialized training of students and the development of their educational and special abilities (artistic technological, etc.) in the structure of multi-level vocational education acts as an important direction of its development.

2357-1330 © 2020 Published by European Publisher.

Keywords: Continuing education, education environment, educational abilities, pedagogical conditions.

Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

Identification of abilities and their proper development is the most important pedagogical tasks requiring special attention, solutions, and approaches. From our point of view, it is especially relevant in the process of constructing multi-level educational complexes (continuing professional education) on the basis of continuity (Cervero, 1988, 2000; Davis et al., 1995; Fox & Bennett, 1998; Hossain et al., 2018; Marope et al., 2015; McLean, 2007; Nolan et al., 2000; Wilson & Hayes, 2009). C. Houle refers to continuing professional education in observing that "whether it designates the improvement of professional competence or any other goal, (it) implies some form of learning that advances from a previously established level of accomplishment to extend and amplify knowledge, sensitiveness or skill" (Houle, 1972, p. 77).

#### 2. Problem Statement

Regarding pedagogical conditions that contribute to the development of the educational and special (artistic, technological and other) abilities of schoolchildren, we adhere to the position that pedagogical conditions are a complex of objective possibilities of content, forms, methods, means as well as material-and-spatial environment, focused on solving the above-mentioned tasks (Nesterova, 2017).

Pedagogical conditions act as the most appropriate circumstances that contribute to creating an integrated environment. In other words, this is such a structure of the educational process in which the development of artistic abilities is most effective. In order to identify pedagogical conditions aimed at developing the students' educational and special (artistic) abilities, the environmental approach was applied. According to the available research works, this approach refers to the complex of the conditions and the relational system around the student. They provide appearance and further development of educational and special (artistic) abilities that stimulate a variety of artistic activities.

#### 3. Research Questions

We have developed and implemented the concept of continuity of secondary vocational and higher education, in the process of implementation of which it became clear that there is a need for involving into the multi-level complex general secondary education institutions as well.

Guided by this need, a continuous successive trajectory of vocational training for technology and design teachers as well as designers was constructed, the above-mentioned professionals are trained by Kurgan College of Technology, Kurgan State University, Irkutsk State University and other universities and institutes according to the integrated educational programs.

However, in the process of implementing the concept, a serious problem arose associated with the low level of development of applicants' educational and special (artistic) abilities, which are the basis of this professional activity.

As part of the professional orientation of secondary school students, we organized the Young Artist Class Studio to develop artistic abilities, the one that trained and prepared future designers and teachers of technology and design for studying at college and university.

## 4. Purpose of the Study

We identified a circle of problems affecting this process. Experimentally, a range of tasks was revealed which is necessary for developing this group of abilities. To solve this problem in order to obtain the results, it is necessary to pay attention to the pedagogical conditions: it is with them the systematic and planned activity of all the participants in the educational process complies.

It is also important to note the very fact of education orientation:

1) on the features of age-related development of a person as a person, partner and professional, his willingness and ability to learn in general and to learn how to learn in particular ("zone of proximal development", "sensitive periods of development", the presence of socio-psychological and psycho-physiological conditions for development and the possibility of mastering "leading" human development activities);

2) on the features of the development of special abilities of a person as a (future) professional at different stages of professional development;

3) on the features of each individual stage of continuous education as an education that lasts a lifetime and, thus, combines all human competences and skills (educational and vocational, creative, reproductive, etc.) (Brossard, 2004; Chaiguerova et al., 2012; Elkonin, 1999; Suzdalova et al., 2017; Yvon et al., 2013; Vygotsky, 1994; Vygotsky, 1997; Wertsch, 1985; Wertsch et al., 1995).

## 5. Research Methods

In the process of research, two concepts were introduced that were defined as basic regarding our research:

- "existing conditions" (the state of the educational environment);
- "newly created conditions" (the interaction of two educational environments in the process of which new conditions appear).

Thus, under the pedagogical conditions for developing educational and special (artistic) abilities, we understand the result of interaction of the secondary school educational environment and the educational environment of the institution of supplementary education for children and emergence of new conditions. The latter are the following:

1. creation of an integrated developing environment;

2. implementation of the continuous interaction of the participants in this process;

3. transfer of the general secondary and supplementary education institution interaction to the systematic level for organizing the process of development of schoolchildren's educational and special (artistic) abilities.

The first condition contains the following components: the objects of the surrounding reality; the subjects of the process for performing a variety of artistic activities; means, methods, forms of organization and implementation of artistic abilities development; the methodological association aimed at interaction of secondary school teachers of fine art and supplementary education teachers of continuing education institution for children; development and support of individual educational routes for the

development of students' educational and special (artistic) abilities; the author's integrated program serving as a model for joint activities of the teacher of fine art of a general secondary education school, and a teacher of children's and school supplementary education institution.

The environmental approach is a theory of the process of student formation and development, which is implemented by a specially organized management environment. In pedagogical science, this approach was formulated by Manuylov (2008), who defined it as "the theoretical basis of the strategy of controlling indirectly the processes of personality formation and development" or "the system of actions of the management entity with the environment in order to turn it into a means of diagnosing, project planning and producing a pedagogical result". Among the basic procedures of the environmental approach, we note environmental formation, niches filling, environment inversion (in order to restore understanding of the environment for the students themselves), averaging, typification (Shek, 2001).

However, we used this approach only partially, in the framework of defining the tasks and strategies for involving schoolchildren in building their own educational paradigm, aimed specifically at developing their artistic abilities necessary for mastering the profession.

Speaking about determining the content of the methodological principles of the environmental approach as a pedagogical activity, Manuylov (2008) notes that three steps are of great importance here. The first is environmental diagnostics; the second is environmental project planning, which includes the following necessary actions:

- forecasting the enabling capabilities of the environment as a region of the search for management decisions;
- designing appropriate values for its niches;
- modeling of environment-forming strategies to give appropriate values to the niches;
- planning the measures to implement these environmental education strategies.

The third important step is the environmental production of the educational result, when certain actions generate an environment that affects the student's personality and contributes to the formation of a personality type that corresponds to the environment set by the teacher.

As a result of consistent influence by the environment, the teacher achieves a necessary impact on the student.

#### 6. Findings

The basic concept of the environmental approach is the "educational environment", at that, some scholars note its synonymy with the concept of "environmental approach".

Today, there are several interpretations of the concept of "educational environment."

In the framework of the theory of the environmental approach, the environment acts as a means of education exclusively for certain values of its niches. The entire technology of the approach under consideration is based on modal values of the environment, which are formed under the influence of the elements and are a lever in the mechanism of transformation of this environment into the space and means of an educational kind (Manuylov, 2008).

However, one should not refute or fail to take into account other approaches that suggest that the "educational environment" should be understood as a combination of material factors of the educational process and interpersonal relations which the subjects of education establish in the process of their interaction (Yasvin, 2001). An educational environment can be called developing if it provides the following opportunities:

- satisfaction and development of the subject needs at all hierarchical levels;
- assimilation by personality of social values;
- their organic transformation into internal values.

In other words, a developing educational environment provides an opportunity for selfdevelopment of all the subjects of the educational process. The whole complex of such opportunities that are provided by a certain educational environment makes up its developing potential. We take into account that the components of the educational environment are the spatial-and-object, social, technological ones as well as the relationship between the spatial-and-object and social components, they provide with pedagogical means the developing opportunities of the educational environment (Yasvin, 2001).

Within the framework of the multilevel educational complex that we built on the basis of continuity, it is especially evident that the educational environment and educational conditions are the more effective the longer the individual is involved in the process of his own professional education.

We have empirically proven the effectiveness of artistic knowledge acquisition by students previously involved in a continuous educational environment, through developing their creative and artistic abilities in the Young Artist Studio organized by us on the basis of the university.

The educational environment has a target function, which consists of personality formation according to a given pattern. Moreover, the objects of systemic practical impact include such elements of the educational environment as the student's immediate school environment, his family environment, the system of institutions of supplementary education, the total guiding and program requirements for both students and the personality of the teacher.

We consider the environment as a place created by a person. Such environment is a condition for the development of abilities, as well as an indicator of professional creativity of specialists since its development requires from teachers to have imagination and a variety of ways to create it (Ivanov, 2016). At the same time, we actively influence this environment, creating a stable professional perspective for future applicants.

Based on the traits of personality or a type of personality (which is "formed" in a particular educational system or environment), scientists distinguish several types of educational environments (dogmatic; serene; career; creative), as well as three components (social (social environment), spatial-and-object (spatial-and-object environment), psycho-didactic).

Most researchers identify common, typological features of the educational environment. Finding themselves in any of educational environments, manifesting in it or forming it, the same pedagogical and educational systems unequivocally and ambiguously "give out" their characteristics into the pedagogical process.

Educational environments are, by definition, multi-vector ones. Such a vector of changes (spontaneous or conscious evolution, involution ("shrinking") and revolution (qualitatively jump-like transformations) often (based on historical and pedagogical experience) is a cultural and behavioral stereotype (or several stereotypes) of all participants in the pedagogical process, as well as in the processes of education, training, development, "reproduction" of the person himself.

In the process of a comprehensive analysis of the scholarly literature, we have revealed that the environment is a potential means of controlling the formation of personality and it provides pedagogically appropriate management of the environmental influences on the development process of the student (Davydov, 2008; Dorozhkin & Zeer, 2014; Fleer & Hedegaard, 2010; Kirby et al., 2009; Legenchuk & Savinykh, 2016; Legenchuk & Legenchuk, 2016; Malushko et al., 2016; Mosweunyane & France, 2017; Moreva, 2008; Nemirovskiy & Nemirovskaya, 2018; Shafranov–Kutsev & Efimova, 2017; Shipilina, 2013). This is extremely important for building the trajectory of his professional development on the basis of continuity.

To further unify the use of the educational and special (artistic)abilities of the students focused on obtaining professional knowledge in a multilevel educational complex, we have determined that the system of actions with the environment is aimed at turning it into a means of a complex targeted influence on the student's personality. The objective of the environment is to form the learner according to his own image and likeness, as well as to reveal the following opportunities for the development of his personality:

- general socio-psychological abilities, event status (to communicate with other people, collaborate with them, compete, empathize, etc., to be associates, contemporaries, etc.);
- educational abilities are the ability to learn, including managing the processes of learning and self-learning;
- to have or be able to do (to have knowledge of fine art and be able to draw, and eventually, somehow or other, to become, for example, an artist, and, most importantly, to become a person adapted to the requirements of the society in the modern world of art.

From here it can be defined that those who have found themselves in the educational conditions adequate to his needs possess great potential for revealing artistic abilities and, in general, schoolchildren and students creative thinking.

Having an impact on the lifestyle of students, the educational environment sets up certain stereotypes, patterns, and "corridors" of life movement. As a result, it typifies the personality, providing an opportunity for the society through education and development to implement in practice widespread ideals, to receive one or another type of personality. But no negative influence on the individuality, originality, uniqueness of the student himself is observed since the field of individual manifestation remains extremely wide.

Based on our study, the results are obtained that allowed us to conclude that the development of educational and special (artistic) abilities in students by involving them in the educational environment of a college or university is more effective than in the peer environment.

Out of 38 secondary school students who attended our studio (the head is D. V. Legenchuk) in 2017, 2018, 35 improved the quality of artistic skills. 31 students increased their academic performance at

art school and in subjects related to the construction and design at general secondary school. 30 studio graduates are successfully studying at universities according to their chosen profession, their performance in subjects related to painting is above average. Only one of the studio's graduates believes that he spent his time in vain and to no avail.

Herein we also see a result. In our opinion, it was necessary to select the applicants to the studio, and, in addition to determining the level of their educational and special (artistic) skills, to determine both the professional bias and career preferences.

In the modern world, there is an active search for new technologies for the implementation of training and management of training, its organization, aimed at developing the creative and other abilities of a person, stimulating his self-study and motivation for continuous learning (Arpentieva et al., 2020; Badalov et al., 2020; Kassymova, Lavrinenko et al., 2020; Kassymova, Gimazov et al., 2020; Kenzhaliyev et al., 2020; Triyono et al., 2020; Tyumaseva et al., 2020). For the formation and development of students' abilities, constant diagnostics is necessary for the selection and correction of applicants for certain specializations: highlighting the level of educational and special knowledge and skills of students/applicants, etc. as well as identifying their professional and career orientations and aspirations.

#### 7. Conclusion

Modern approaches to the organization of the educational process, which are presented in educational standards, suggest the creation of educational environments aimed at ensuring the development of interests, abilities and inclinations of students. In our study, the interaction of two environments, i.e. of educational institutions and institutions of supplementary education, reveals new conditions that affect the development of students' educational and special (artistic) abilities.

Based on the study, we were able to formulate the following conclusions.

1. The theoretical foundations of the interaction of general secondary and supplementary education in the process of developing the students' educational and special (artistic)abilities are the concepts of the educational space, the integrity of the integrated developing environment, the intrinsic value of general secondary and supplementary education.

2. In the development of the educational and special (artistic) abilities of students, the continuity of interaction is an inextricable link of a consistent holistic system of activity of educational institutions. This system ensures the consistency of each component in organizing artistic activity (goals, objectives, content, methods, means, forms), which ensures the continuous progressive development of these abilities and implements the principle aimed at taking into account the previous, present and future levels of development of students' artistic abilities.

The main program-and-methodological conditions for the continuous interaction of educational institutions in the framework of the development of the applicants' educational and special (artistic)abilities include:

 creation of an integrated developing environment of these institutions, which facilitates the interaction of all components of the educational space: external (art museum, exhibition hall, workshops of the members of the regional branch of the Union of Artists of the Russian Federation, off-site exhibitions and competitions of creative works), and internal (lessons, classes, "plein air" painting or painting outdoors, exhibitions of creative works, etc.);

- an integrated program of the "Young Artist" Class-Studio for the development of artistic abilities, which provides a meaningful basis for cooperation between school teachers, teachers of supplementary education, university teachers;
- conducting joint methodological work of school teachers, university and college teachers and teachers of supplementary education.

3. The effectiveness of the proposed conditions for the interaction of general secondary and supplementary education of children in the development of artistic abilities is provided by:

- creating the author's concept of the development of students' educational and special (artistic) abilities, the model of the process of development of their educational and special (artistic)abilities in an integrated educational environment;
- expanding the scope of cooperation of college teachers, university teachers and teachers of continuing education institutions as well as school teachers in order to improve the content and forms of work in order to develop the educational and special (artistic)abilities of secondary school students.

In conclusion, we emphasize once again the moment of orientation of the continuing education system at each individual moment of its implementation:

1) on the features of age-related development of a person as a person, partner and professional, his willingness and ability to learn in general and to learn how to learn in particular ("zone of proximal development", "sensitive periods of development", the presence of socio-psychological and psycho-physiological conditions for development and the possibility of mastering "leading" human development activities);

2) on the features of the development of special abilities of a person as a (future) professional at different stages of professional development;

3) on the features of each individual stage of continuous education as an education that lasts a lifetime and, thus, combines all human competences and skills (educational and vocational, creative, reproductive, etc.).

The objective of the educational environment in continuing professional and pre-professional education is to form the learner according to his own image and likeness, as well as to reveal the following opportunities for the development of his personality:

- general socio-psychological abilities, living abilities, abilities of survival and development, coexistence with other people (to communicate with other people, collaborate with them, compete, empathize, etc., to be associates, contemporaries, etc.);
- educational abilities are the ability to learn, including managing the processes of learning and self-learning;
- to have or be able to do (to have knowledge of fine art and be able to draw, and eventually, somehow or other, to become professional and, most importantly, to become a person adapted to the requirements of the society in the modern world of art and science, technology and nature.

## References

- Arpentieva, M. R., Gorelova, I. V., Kassymova, K. G., Lavrinenko, S. V., Shumova, K. A., Malinichev, D., Simonov, V. L., Kosov, A. V., Garbuzova, G. V., & Stepanova, O. P. (2020). Human resource management and dynamic capabilities of educational enterprises: psychological, social and economical aspects. *Bulletin of the National Academy of Sciences of the Republic of Kazakhstan, 1*(383), 242–254. https://doi.org/10.32014/2020.2518-1467.30
- Badalov, A. A., Brovkina, S. N., Arpentieva, M. R., Kalinin, S. S., & Kassymova, G. K. (2020). The Archetype of Intellectual Activity: A Modern Methodology for the Description of the Protophenomenon. *Clinical Psychology and Special Education*, 9(1), 01–16. https://doi.org/10.17759/cpse.2020090101
- Brossard, M. (2004). *Vygotsky, lectures and perspectives on educational research*. Presses universitaires du Septentrion.
- Cervero, R. M. (1988). Effective Continuing Education for Professionals. Jossey-Bass.
- Cervero, R. M. (2000). Charting a Course for Continuing Professional Education; Reframing Professional Practice. Jossey-Bass.
- Chaiguerova, L., Zinchenko, Y., & Yvon, F. (2012). *Vygotsky, a theory of development and education*. Moscow State University.
- Davis, D. A., Thomson, M. A., Oxman, A. D., & Haynes, R. B. (1995). Changing physician performance: A Systematic Review of the Effect of Continuing Medical Education Strategies. *Journal of the American Medical Association*, 274, 700–705.
- Davydov, V. V. (2008). Problems of developmental instruction. Nova Science Publishers.
- Dorozhkin, E. M., & Zeer, E. F. (2014). Methodology of vocational and pedagogical education: theory and practice (theoretical and methodological foundations of vocational and pedagogical education). *Education and Science*, 14(9), 4-20.
- Elkonin, D. B. (1999). How to teach children to read. *Journal of Russian and East European Psychology*, 37(6), 84-92. https://doi.org/10.2753/RP01061-0405370684
- Fleer, M., & Hedegaard, M. (2010). Early Learning and Development: Cultural-historical Concepts in Play. Cambridge University Press. https://doi.org/10.1017/CBO9780511844836.017
- Fox, R. D., & Bennett, N. L. (1998). Learning and change: implications for continuing medical education. British Medical Journal, 316, 466–468.
- Hossain, A. K. M., Nazim, A. Q., Hossain Sh., Haque, O., Hossain, M. A., Hossain, Z., & Ahmed, Sh. (2018). Impact of continuous professional education on leadership for rehabilitation professionals in Bangladesh: a pilot study. *Journal of Medical Research and Innovation*, 3(1), e000158. https://doi.org/10.32892/jmri.158
- Houle, C. O. (1972). The Design of Education. Jossey-Bass.
- Ivanov, A. V. (2016). The phenomenon of the cultural environment of the educational organization in the development of spiritual values by children. *Pedagogical education in Russia*, 4, 198-205.
- Kassymova, G. K., Gimazov, R. M., Bulatova, G. A., Podol'skaya, I. A., Posypanova, O. S., Stepanova, G., Kirichkova, M. E., & Arpentieva, M. R. (2020). Problem of agency and authenticity of a person with disabilities and relationships in counselling. *Bulletin of the National Academy of Sciences of the Republic of Kazakhstan, 4*(386), 284–293. https://doi.org/10.32014/2020.2518-1467.129
- Kassymova, G. K., Lavrinenko, S., V., Kraynova, E. R., Gasanova, R. R., Kamenskaya, E. N., Kosov, A. V., Arpentieva, M. R., & Gorelova, I., V. (2020). Modern concepts and archetypes of the management in education: psychological, social and economical aspects. *Bulletin of the National Academy of Sciences of the Republic of Kazakhstan, 2*(384), 194–204. https://doi.org/10.32014/2020.2518-1467.59
- Kenzhaliyev, O. B., Ilmaliyev, Zh. B., Triyono, B. M., Minghat, A. D., Arpentieva, M. R., & Kassymova, G. K. (2020). Commercialization of Research and Development Results as the Economy Growth Factor of the Republic of Kazakhstan. *International Journal of Advanced Science and Technology*, 29(7s), 18-28. http://sersc.org/journals/index.php/IJAST/article/view/9410

- Kirby, D., Curran, V., & Hollett, A. (2009). Non-formal adult learning programs at canadian postsecondary institutions: trends, issues, and practices. *Canadian Journal of University Continuing Education*, 35(2), 63–86.
- Legenchuk, D. V., & Savinykh, V. L. (2016). *Pedagogical conditions for the succession of multilevel* vocational education in the region. Problems of modern teacher education. Yalta.
- Legenchuk, E. A., & Legenchuk, D. V. (2016). Some components of the multilevel vocational education management process. In *Continuing education in the modern world: history, problems, prospects. Materials of the IV International Correspondence Scientific and Practical Conference* (p. 162– 165). Publishing House "Pero".
- Malushko, E., Maletina, O., Lizunkov, V., & Tsybaneva, V. (2016). Use of virtual learning system for educating students with disabilities and special needs. *International Multidisciplinary Scientific Conferences on Social Sciences and Arts*, 481-487.
- Manuylov, Yu. S. (2008). Conceptual foundations of the environmental approach in education. Bulletin of N.A. Nekrasov Kostroma State University, Series: Pedagogy. Psychology, 14, 21-27.
- Marope, P. T. M., Chakroun, B., & Holmes, K. P. (2015). Unleashing the Potential: Transforming Technical and Vocational Education and Training. UNESCO.
- McLean, S. (2007). About Us: Expressing the Purpose of University Continuing Education in Canada. *Canadian Journal of University Continuing Education*, 33(2), 65–86. https://doi.org/10.21225/D5CS3K
- Moreva, N. A. (2008). Pedagogy of secondary vocational education: a textbook for students. higher training institutions: in 2 volumes [Didactics] (Vol. 1). Publishing Center "Academy".
- Mosweunyane, D., & France, K. M. (2017). Lifelong learning for sustainable development in the developing world. *International Journal of Academic Research in Progressive Education and Development*, 6(4), 01-12. https://doi.org/10.6007/IJARPED/v6-i4/3072
- Nemirovskiy, V. G., & Nemirovskaya, A. V. (2018). Social competitiveness: chances of success in youth and adults. *Sociological Journal*, 24(2), 135–149.
- Nesterova, J. R. (2017) Pedagogical conditions for the development of creative abilities of younger schoolchildren in visual activity by means of painting, taking into account federal state requirements. Bulletin of N.A. Nekrasov Kostroma state university. Series: Pedagogy. Psychology, 5, 23-27.
- Nolan, M., Owen, R., Curran, M., & Venables, A. (2000). International Journal of Nursing Studies. *International Journal of Nursing Studies, 37*(5), 457-467. https://doi.org/10.1016/s00207489(00)00025-0
- Shafranov–Kutsev, G. F., & Efimova, G. Z. (2017). The formation of competitive personality traits is the main task of the education system. Alma mater. *Bulletin of higher education*, *10*, 69–76.
- Shek, G. G. (2001). Environmental approach as a pedagogical innovation and the conditions for its development (Doctoral Dissertation). University Publ.
- Shipilina, L. A. (2013). Methodology of psychological and pedagogical research. FLINTA, Science Publ.
- Suzdalova, M. A., Lizunkov, V. G., Malushko, E. Yu., Sytina, N. A., & Medvedev, V. E. (2017). Innovative Forms of Partnership in Development and Implementation of University-Business Cooperation. *The European Proceedings of Social and Behavioural Sciences EpSBS, XIX*, 450-455.
- Triyono, B. M., Mohib, N., Kassymova, G. K., Pratama, G. N. I. P., Adinda D., & Arpentieva, M. R. (2020). The Profile Improvement of Vocational School Teachers' Competencies. *Higher Education in Russia*, 29(2), 151-158. https://doi.org/10.31992/0869-3617-2020-29-2-151-158
- Tyumaseva, Z. I., Kassymova, G. K., Shaimardanov, R. H., Elmendeeva, L. V., Minaeva E. I., Gorgotz, O. V., Arpentieva, M. R., & Kosov, A. V. (2020). Psychological and social aspects of innovations and standardization in education. *Bulletin of the National Academy of Sciences of the Republic of Kazakhstan, 4*(386), 274–283. https://doi.org/10.32014/2020.2518-1467.128

Vygotsky, L. S. (1994). The Vygotsky reader. Blackwell.

Vygotsky, L. S. (1997). The collected works of L. S. Vygotsky (Vol. 3). Plenum.

Wertsch, J. V. (Ed.) (1985). Culture, communication and cognition. Cambridge University Press.

- Wertsch, J. V., del Rio, P., & Alvarez, A. (Eds.) (1995). Sociocultural studies of mind. Cambridge University Press. https://doi.org/10.1017/CBO9781139174299
- Wilson, A. L., & Hayes, E. (Eds.) (2009). *Handbook of adult and continuing education*. John Wiley & Sons.

Yasvin, V. A (2001). Educational environment: from modeling to design. Sense Publ.

Yvon, F., Chaiguerova, L. A., & Newnham, D. S. (2013). Vygotsky under debate: two points of view on school learning. *Psychology in Russia*, 6(2), 32-43.