

PSYRGGU 2019
**Psychology of subculture: Phenomenology and Contemporary
Tendencies of Development**

**EXPERIENCE OF CREATING INNOVATIVE AND
DEVELOPMENTAL ENVIRONMENT IN MASTERS'
PROFESSIONAL TRAINING**

Natalya V. Abramovskih (a)*, Evgenia A. Kazayeva (b), Elena N. Grigoryan (c), Yulia G.
Taktueva (d)

*Corresponding author

(a) Department of Theory and Methodology Of Preschool and Primary Education Surgut State Pedagogical
University, street 50 years VLKSM 10/2, Surgut, Russia E-mail:natali-270171@mail.ru

(b) Ural State Pedagogical University, the Avenue of Cosmonauts, 26, Yekaterinburg, Russia,
E-mail: kazaevaevg@mail.ru

(c) Ural State Pedagogical University, the Avenue of Cosmonauts, 26, Yekaterinburg, Russia,
E-mail: elena_n_r@mail.ru

(d) Ural State Pedagogical University, the Avenue of Cosmonauts, 26, Yekaterinburg, Russia,
E-mail: taktueva@mail.ru

Abstract

In modern Russian education there are a lot of reasons that cause the interest to educational processes consideration in terms of innovative activity. Among those there is a tendency to keep the balance between traditions and innovations in the field of education, paying attention to the concept of developmental education and implementation of system and activity approach principles. The aim of the article is to present the activity experience in implementation of innovative and developmental environment in professional training of Master's Degree students studying in the program of professional training 'Innovative primary school' worked out and realised in Surgut State Pedagogical University. The authors have investigated the components of innovative and developmental environment and present the practical experience on their implementation in terms of organisation of practical training of Master's Degree Students for innovative professional activity. Work experience of the professors engaged in Master's Degree Program 'Innovative primary school' allows to state that special attention should be given to possibilities of active cooperation of Master's Degree students with innovative and developmental environment, moreover, to be active participants of that environment on the ground of creative innovative activity.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Professional education, Master's Degree Program, subjectivity, innovative and developmental environment,



1. Introduction

The problem of creating and effective functioning of innovative educational environment for development of a personality as a member of society and the problem of cooperation of that environment with social and cultural processes in society are vital both for school and higher education institution (Geitz, Brinke, & Kirschner, 2016; De Boer, Janssen, & van Driel, 2016; Ivanova & Popova, 2017; Lourmpas & Dakopoulou, 2014; Lucas, Claxton, & Spencer, 2013; Mansfield & Beltman, 2014; Vasyagina, Grigoryan, & Kazayeva, 2018). The term 'educational environment' came into category definitions long ago enough and in modern education it is under broad investigation and is considered to be a complex of material, spatial and subject, social and interpersonal components (Borovskaya, 2018; Kulyutkin & Tarasov, 2018; Yasvin, 2001). In view of this, scientists and experts pay special attention to system creation of educational environment to get a developmental effect from its influence on system of education (Frumin & Dobryakova, 2012; Klemenchich, 2016). The influence and the problems of cooperation of a man and the environment are under study in such sciences as philosophy, history, sociology, psychology, pedagogy, ecology and the others.

2. Problem Statement

However, despite the rather clear identification of methodological approaches to the definition 'educational environment', to determination of principles of its creation and to revealing of structural and functional components there are problems of practical appliance of the theory of real educational environment creation in terms of its developmental influence on system of professional training of Master's Degree students (Meece, Anderman, & Anderman, 2006; Papaioannou & Christodoulidis, 2007).

3. Research Questions

So, there is a contradiction between the demand of creation of innovative and educational environment in modern Master's Degree Program in modern system of vocational education and the methodological support of this problem solution in work experience of professors realising Master's Degree Programs.

4. Purpose of the Study

The means of practical support of innovative and educational environment in modern Master's Degree Program are poorly connected, thus, there is a necessity in specification of approaches to reasonable creation of educational environment in higher education institution.

5. Research Methods

Theoretical analysis of psychological and pedagogical literature on the investigation problem, analysis of work experience of the university professors on implementation of the Master's Degree Program 'Innovative primary school', questionnaire of managers of educational institutions, analysis of statistics accounts. The period of diagnostic investigation is 2016-2018.

6. Findings

The main conceptual approaches to creating continuing pedagogical education system prove the necessity of each level direction at reaching a definite level of development of a teacher's professional competency, herewith, each level of preparation (Bachelor's Degree Program, Master's Degree Program or Post Graduate Program) is characterized for complication of tasks to the solution of which a teacher must be prepared (Ananyeva & Magdanova, 2013; Gruzdev & Terentev, 2016; Vasyagina & Kazaeva, 2016; Yesenskaya, 2003; Karavayeva, 2015; Kuznetsova, 2011; Khairutdinova, Kazaeva, & Czerwinski, 2016; Markin & Voronov, 2016; Shmatko, 2016; Vasyagina, 2017).

To find out possible difficulties among young teachers there was a survey held among the managers of educational institutions of Surgut (16 participants).

The first question is 'Are there any problems in scientific-research and innovative-methodical supply of professional activity among teachers of your educational institution?':

- variant 'Yes' is chosen by 11 participants;
- variant 'No' is chosen by 3 participants;
- variant 'It's difficult to answer' is chosen by 2 participants.

The second question is 'According to you, what knowledge/skills is in short supply among young teachers for effective work in your educational institution?' (any variants quantity is possible to choose):

Variants 'Knowledge in main subject field (fields)', 'Methodical competency in realising subject field (fields)' and 'Management and administration' were not chosen.

Variants 'Computer and information technologies skills appropriate for teacher's work' and 'Knowledge in behaviour features of students and methods of work organisation at a lesson' were chosen once each.

Variants 'Methods of individual education' and 'Education in multicultural or multi-language environment' were chosen by 3 participants.

Variant 'Students assessment practice' was chosen by 4 participants.

Variant 'Methods of development of competences at students necessary for further work or education', 'Education of gifted students' and 'Cooperation with students' families' were chosen by 5 participants.

Variant 'Interdisciplinary skills education (for example, to teach to solve problems, to teach to study)' and 'Work with students having behaviour problems' were chosen by 6 participants.

The greatest number of choice was done for variant 'Usage of innovative pedagogical technologies in work' (12 participants).

So, more than half of managers of educational institutions (68%) mention insufficient mastery of innovative technologies of educational process organisation among young teachers. Due to the demand of these competences development among young teachers the program on training program 44.04.01 Pedagogical education, direction 'Innovative primary school' was implemented in Surgut State Pedagogical University.

By means of Bachelor's Degree Program direction at pedagogical and methodical training of future primary school teachers, competences formation in sphere of education and innovative educational activity implementation in the system of Bachelor's Degree students' preparation are not paid enough attention to.

In this regard, possibilities of Master's Degree Program, the main purpose of which is profound professional preparation of students training in the sphere of scientific-research, project and innovative activities appliance in primary school, are much greater in terms of solving the defined component of primary school teacher preparation. Thus, while working out the contents of Master's Degree Program the special attention was given to finding out the constituents of primary school teacher readiness for innovative professional activity (Safronov & Sidorova, 2016). Based on the methodological guidelines on organisation process in higher education institution, considered in the work of Lazarev (2006) and with an account of innovative constituent of the process, the following components of readiness for innovative professional activity of a Master's Degree student can be defined:

- presence of the motive of inclusion into innovative professional activity;
- complex of knowledge of modern requirements for school education results, of innovative models and education technologies;
- competency in the field of pedagogic innovation theory.

In the Federal State Education Standard of higher education on training program 44.04.01 Pedagogical education (Master's Degree level) it is noted that 'in development and implementation of Master's Degree Program an institution fixes on a certain type (types) of professional activity, for which a Master's Degree student is prepared, with an eye on labour market needs, scientific-research and material- and technical resources of an institution'. Thus, identification and project development of innovative and developmental environment in Master's Degree students' preparation has become the most important level in Master's Degree Program development.

In this work under educational environment of Master's Degree Program we understand the complex of information resources, technologies and conditions favourable to creation, existence and development of professional preparation system of students including the quality of processes, emotional background during the process of professional preparation and personality well-being of its subjects.

Formation of motivation preparation for inclusion in innovative professional activity was realized through interactive educational technologies appliance. Herewith, the special attention was given to introduction of group forms of activity organisation of Master's Degree students and independent work (Kiselyova, 2016). Students applying for Master's Degree Program already have professional preparation experience at the level of Bachelor's degree Program or Specialist Program. Thus, synergetic effect can be reached through inclusion of collective activity forms contributing to creative opinions exchange, enrichment of appearing ideas, choice of effective methods and technologies of educational and practical tasks solution in innovative and developmental environment (Gorshenin, 2010; Milovanova, 2009; Fomina & Kharitonova, 2010). Project works are of special attention among the professors of Master's Degree Program 'Innovative primary school'. That explains the usage of collective lessons methods with creative student groups' organisation, with arrangement of proper tasks on project performance among students and project correspondence to professional activity training of a primary school teacher at lessons. The suggested approach implies that collective project efficiency, innovative appeal for modern school, implementation possibility in education system and validity of methods of project implementation in system of primary school education serve as the purpose of efficiency assessment of the performed collective project.

The second component, a constituent of Master's Degree student's preparation for innovative professional activity, is the complex of knowledge about modern requirements for school education results, innovative models and education technologies. We consider the development of practice system and conditions provision for effective implementation in innovative and developmental environment created in cooperation of a higher education institution and educational institutions playing the role of practice bases as the main means of effective development of this component (Butler & Shibaz, 2008). Let's demonstrate it on the example of the practice on acquiring professional skills and experience of professional activity (scientific-research practice). The practice aims at conditions creation for skills development of students to hold an independent scientific search, to estimate their abilities in way determination of their professional and scientific growth and to master the ways of solution of scientific-research activity tasks. This practice contributes to complex formation of universal-cultural and professional competences at students and provides Master's Degree students with possibility of experience acquisition of effective professional activity realisation both scientific-research and innovative-methodical in accordance with the features of the training program 'Innovative primary school'.

The third component, a constituent of Master's Degree student's preparation for innovative professional activity, is competency in pedagogic innovation theory. Due to this, various organisation forms of scientific-research activity of Master's Degree students aimed at experience development are included in innovative and developmental environment of higher education institution:

- the experience of usage of modern computer technologies of information search in the investigated field;
- the experience of processing of empiric and statistic data;
- the experience of development of scientific experiment or another empiric investigation.

For assessment of qualitative influence of the created innovative and developmental environment on Master's Degree students' readiness for innovative professional activity in terms of implementation of Master's Degree program 'Innovative primary school' a complex diagnostic research was held. The objects of quality assessment of education in Master's Degree Program are:

- educational process management;
- educational process organisation;
- educational process results (publication activities, participation in contests, olympiads, conferences, students' advances in educational process).

In accordance with the theme of the paper let's consider the results of the last mentioned above object in details.

One of the meaningful markers of assessment quality of educational programs implementation is students' progress. The data on students' progress in Master's Degree programs (the period of three years) show positive dynamics in increase of both quantitative and qualitative progress of Master's Degree students (see Table 01).

Table 01. Resulting quality of Master's Degree students' progress

	2016	2017	2018
Total progress, %	80	90	100
Qualitative progress, %	75	80	92

Master's Degree students' preparation is characterized for special attention given to scientific-research constituent of the program that is determined by a thesis tutor with an account of a Master's Degree student's interests, and it is fixed in an individual plan and must be directed at solution of scientific top-priority tasks, tasks of innovative practice and vocational education. The results of scientific-research activity of students must be reflected in scientific contributions, olympiads and contests participation (see Table 02).

Table 02. Resulting quality of scientific-research activity of master's degree students

Year	Number of participants / winners						Number of scientific contributions / length (printed sheet)		
	Conferences, symposiums		Total	Olympiads, contests		Total	Indexed and national journals	Foreign journals	Total
	All-russian	International		All-russian	International				
2016	6	0	6	3/2	1/1	4/3	6/1,3	0	6/1,3
2017	8	1	9	5/2	2/1	7/3	7/1,4	0	7/1,4
2018	16	4	20	6/4	1/1	7/5	14/4,6	1/0,4	15/5

The data analysis shows the increase in publication activities and contests participation. However, the activities in these types of scientific-research activity are not high in different markers, and that requires support both from the manager of the program and thesis tutors. It's necessary to focus attention on the necessity of requirements' severization for the level and quality of research results testing in international journals, issues recommended by SCADT and prospects of their real implementation in science and practice. By all means, the main marker of work efficiency of a Master's Degree student is still thesis defence, but students' participation in scientific-research work on implementation of the complex theme of the department and higher education institution, in scientific projects and grants are no less meaningful in resulting quality of Master's Degree Programs implementation.

The survey of modern investigations considering the problems of multilevel teachers' preparation shows that the main attention is given to consideration of theoretical and methodical approaches to creation special technologies and methods of professional teacher's preparation. However, the important area is still the problem of education continuity in transition from Bachelor's Degree Program to Master's Degree Program. Herewith, a separate profound research is required for development of the problem of developmental educational environment creation and for experimental proof of resulting quality of conditions of its creation and implementation in practical work of higher education institutions.

7. Conclusion

Consequently, innovative and developmental environment of higher education institution is the system of dialectic cooperation of social, spatial and subject, communicative and didactic components

providing with effective conditions for readiness development among Master's Degree students for participation in innovative activity of a primary school. At creating innovative and developmental environment its possibilities for wholesome development of components of readiness of Master's Degree students for innovative professional activity via interactive forms of educational process organization, system of practical preparation and participation of Master's Degree students in scientific-research activity under the control of professors must be the main purpose.

References

- Ananyeva, M.S., & Magdanova, I.V. (2013). Building of common cultural and professional competence of Bachelors in teaching with regional cultural environment. *Pedagogical education in Russia. Yekaterinburg: UrSPU Publishing*, 3, 165-170.
- Borovskaya, Ye.V. (2018). Environmental approach in upbringing as the means of pedagogical knowing and environment usage in pedagogical process. *Social scientific laboratory of environment and environment researches in education: Site of Ye.V.Borovskaya*. <http://sreda-lab.narod.ru/index/0-24>.
- Butler, R., & Shibaz, L. (2008). Achievement Goals for Teaching as Predictors of Students' Perceptions of Instructional Practices and Students' Help Seeking and Cheating. *Learning and Instruction*, 18(5), 453-467. <https://doi.org/10.1016/j.learninstruc.2008.06.004>
- De Boer, E., Janssen, F. J.J.M., & van Driel J. H. (2016). Using an Attribution Support Tool to Enhance the Teacher Efficacy of Student Science Teachers. *Journal of Science Teacher Education*, 27(3), 303-324. <https://doi.org/10.1007/s10972-016-9461-8>
- Fomina, S.N., & Kharitonova, I.V. (2010). Independent work organisation as the means of student's self-organisation in terms of personality oriented approach in education. *Social politics and sociology*, 7(61), 70-77. <http://elibrary.ru/item.asp?id=17054271>.
- Frumin, I.D., & Dobryakova, M.S. (2012). That makes Russian higher education institutions change: non-involvement agreement. *Educational Studies Moscow*, 2, 159-191. <http://dx.doi.org/10.17323/1814-9545-2012-2-159-191>
- Geitz, G., Brinke, D.J., & Kirschner, P.A. (2016). Changing Learning Behaviour: Self-Efficacy and Goal Orientation in PBL Groups in Higher Education. *International Journal of Educational Research*, 75, 146-158. <https://doi.org/10.1016/j.ijer.2015.11.001>
- Gorshenin, A.Yu. (2010). Synergetic effect in innovation oriented educational environment of IT-specialist's preparation. *Educational and innovative technologies: theory and practice: monography. Book 5. Voronezh: VSPU*.
- Gruzdev, I., & Terentev, E. (2016). Life after PhD: What careers do PhD students in Russia consider? *Higher Education in Russia and Beyond*, 3(9), 20-21. [https://herb.hse.ru/en/2016--3\(9\)/192844817.html](https://herb.hse.ru/en/2016--3(9)/192844817.html)
- Ivanova, N.L., & Popova, Ye.P. (2017). Professionals and the problem of innovations implementation in higher education institution. *Educational Studies Moscow*, 1, 184-206. <https://dx.doi.org/10.17323/1814-9545-2017-1-184-206>.
- Karavayeva, Ye.V. (2015). The first experience of development and implementation of programs of academic staff preparation as programs of the third level of higher education: manifested problems and possible solutions. *Higher education in Russia*, 8(9), 5-15. <http://www.vovr.ru/upload/8-915.pdf#915.pdf>.
- Khairutdinova, R.R., Kazaeva, E.A., & Czerwinski, G. (2016). The use of the task method in civic education of students. *International Journal of Environmental and Science Education*, 11(3), 245-259.
- Kiselyova, A.V. (2016). Independent work of students: traditions and new approaches. *Modern higher education institution: innovative aspect*, 8(3), 92-101. <https://dx.doi.org/10.7442/2071-9620-2016-8-3-92-101>
- Klemenchich, M. (2016). Interview for journal 'Education issues / Educational Studies Moscow'. *Education issues / Educational Studies Moscow*, 1, 10-17. <https://dx.doi.org/10.17323/1814-9545-2016-1-10-17>

- Kulyutkin, Yu.N., & Tarasov, S.V. (2018). *Educational environment and personality development*. Retrieved from www.znanie.org/journal/n1_01/obraz_sreda.html.
- Kuznetsova, V.N. (2011). Master's Degree program: formation problems. *Higher education in Russia, 1*, 45-48. <https://elibrary.ru/item.asp?id=15608361>.
- Lazarev, V.S. (2006). *Pedagogical innovation theory*. Moscow: Bagheera-2.
- Lourmpas, S., & Dakopoulou, A. (2014). Educational Leaders and Teachers' Motivation for Engagement in Innovative Programmes. The Case of Greece. *Procedia-Social and Behavioral Sciences, 116*, 3359–3364. <https://doi.org/10.1016/j.sbspro.2014.01.764>
- Lucas, B., Claxton, G., & Spencer, E. (2013). Progression in Student Creativity in School: First Steps Towards New Forms of Formative Assessments. *OECD Education Working Papers, 86*. <http://dx.doi.org/10.1787/5k4dp59msdwk-en>
- Mansfield, C. F., & Beltman, S. (2014). Teacher Motivation from a Goal Content Perspective: Beginning Teachers' Goals for Teaching. *International Journal of Educational Research, 65*, 54-64. <https://doi.org/10.1016/j.ijer.2013.09.010>
- Markin, V.V., & Voronov, V.V. (2016). Preparation of staff of higher qualification in the discourse of Bologna process: highway versus wayside. *Education integration, 20*(2), 164-175. <https://dx.doi.org/10.15507/1991-9468.083.020.201602.164-175>.
- Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom Goal Structure, Student Motivation, and Academic Achievement. *Annual Review of Psychology, 57*, 487-503. <https://doi.org/10.1146/annurev.psych.56.091103.070258>
- Milovanova, G.V. (2009). Independent work and self-study – important conditions of successful professional activity. *Mordovia University Bulletin, 2*, 151–155. <http://vestnik.mrsu.ru/index.php/ru/archiv>.
- Papaioannou, A., & Christodoulidis, T.A. (2007). Measure of Teachers' Achievement Goals. *Educational Psychology, 27*(3), 349-361. <https://doi.org/10.1080/01443410601104148>
- Safronov, P.A., & Sidorova, K.D. (2016). Subjective innovations: pedagogical movement in conditions of radical social changes. *Education issues / Educational Studies Moscow, 3*, 224-237. <https://doi.org/10.17323/1814-9545-2016-3-224-237>.
- Shmatko, N. (2016). PhDs within and outside of the national labor market. *Higher Education in Russia and Beyond, 3*(9), 9-11. [https://herb.hse.ru/en/2016--3\(9\)/192844458.html](https://herb.hse.ru/en/2016--3(9)/192844458.html).
- Vasyagina, N.N. (2017) Professionalno-lichnostnaya napravlennost pedagogicheskikh rabotnikov kak psikhologicheskoye usloviye effektivnosti professionalnoy deyatelnosti v usloviyakh vnedreniya professionalnykh standartov. *Gumanitarnyye sciences, 1*(37), 142-151.
- Vasyagina, N.N., & Kazayeva, Ye.A. (2016). Networking cooperation experience in implementation of Master's Degree program 'School psychology'. *Psychological Science and Education, 8*(3), 63-75.
- Vasyagina, N.N., Grigoryan, E.N., & Kazayeva, E.A. (2018). Socio-Psychological Aspects of Image of Professionally Successful and Unsuccessful Teachers. *Astra Salvensis, 52*, 679-692.
- Yasvin, V.A. (2001). *Educational environment: from modelling to projecting*. Moscow: Smysl. http://pedlib.ru/Books/6/0471/6_0471-1.shtml.
- Yesenskaya, T.V. (2003) *Projecting programs of Master's Degree education* (Doctoral Dissertation). Rostov-on-Don. Retrieved from <https://elibrary.ru/item.asp?id=16004971>