

Teachers' Training in the Magistrate: Structural, Content and Organizational Modernization in the Context of a Federal University

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The paper establishes that the change of an educational paradigm cannot be realized without developing a new view on teachers' mission, their social and professional status, and, in particular, on the process of vocational training in general. Main problems of modern teachers' training and the purpose of pedagogical education at the present stage are singled out in the paper; guidelines of pedagogical education modernization in Russia are updated. The paper reveals essential characteristics of a competence- and activity-based approach in the context of modern teachers' training. The authors provide the analysis of master programs in Kazan Federal University applied for the training direction "Pedagogical education"; identify problems of content and organizational character in this context; highlight advantages and possible risks of a new organizational structure of Master in Pedagogy within a federal university; submit a substantial characteristic of Master's degree programs for training subject teachers, variable trajectories of receiving pedagogical education, forms of educational results presentations. The paper is addressed to administrative and academic teaching staff of higher educational institutions realizing Master's degree programs for the direction "Pedagogical education" and interested in their further modernization.

Keywords: teacher's training, Master's degree, model of pedagogical education modernization

INTRODUCTION

Education today is urged to provide a human with the ability to build up their educational strategy in continuously changing conditions, to form a set of competences including a self-educational competence and demand for life-long personal and professional development. A new paradigm of education specifies certain requirements to the identity of the teacher, their professional competency; it essentially changes target, structural, content and organizational

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components of pedagogical education and assumes quite different approaches to teaching staff training. At the same time, the process of modern teachers' training has a number of problems demanding urgent solutions:

- non-conformity of professional competences that graduates of the majority of pedagogical programs have with the requirements for a teacher's professional standard and tasks of the Federal State Educational Standard for general education;
- a low level of practical training that graduates have studying according to programs of teaching staff training;
- the nature of future teachers' training technologies is not activity-based (reproductive);
- single-channel model of teaching staff training system;
- absence of the system for future teachers' training quality independent assessment (Analytical statement, 2015).

The modern teacher is a creative personality having original problem-pedagogical and critical thinking, capable to elaborate multivariable programs relying on the advanced world experience and new training and education technologies, and interpreting them in specific pedagogical conditions on the basis of diagnostic goal-setting and reflection.

The set of professional requirements to the modern teacher is reflected in the Professional Standard for Teachers (The Professional Standard, 2015).

The training of such a teacher is a long, complete and continuous process that results in the development of personal features, professional competences and subjective readiness for life-long self-education and personality improvement.

LITERATURE REVIEW

Issues of pedagogical education in general are considered in researches of Valeeva (2013), Gilmanshina, Vilkeev (2004), Kuzmina (1993), Piskunova (2001), Slastenin (2000), Talanchuk (1996), et al.

Problems of pedagogical education modernization at the present stage are revealed in works of Bolotov (2013), Bulin-Sokolova, Obukhova, Semenova (2014), Gafurov (2013), Kalimullin (2014), Margolis (2014), Sidorkin (2014), Sharifzyanova (2015), et al.

Issues of Master in Pedagogy training are covered in publications of Vesmanov & Vesmanov, Zhadko, Akopyan (2014), Savenkov, Lvova, Vachkova, Lyubchenko, Nikitina (2014), Margolis (2014).

Guidelines of pedagogical education modernization in Russia are considered in a number of modern papers:

- harmonization of educational results of teachers' training programs with the requirements of the Professional Standard and the Federal State Educational Standard for general education;
- increase of programs' practical orientation (development of a new model of practices including network interaction with educational organizations realizing programs of general and secondary vocational education – "school-university partnership", long-term industrial practice in an educational institution, distributed modular practice);
- implementation of a modular principle to design training programs;
- realization of network interaction with educational organizations of general, secondary vocational and higher education;
- mobility increase (Analytical statement, 2015);

- change of content and procedure of a final state certification (it has to assess both knowledge and competences (techniques, ways and methods) within the procedure of state final certification and readiness to implement professional actions in the context of the teacher's professional standard which have to be fixed in an electronic portfolio of the graduate) (Margolis, 2014);
- creation of an effective system of vocational guidance and professional selection for a pedagogical profession;
- development and introduction of programs for post-graduates of pedagogical programs on workplaces and within specially organized post-degree traineeship in the conditions of long-term training in an educational organization (Margolis, 2014).

Results of regular monitoring of employers' requirements in education allowed to reveal their main demands for priorities in pedagogical staff training, namely (Vesmanov & Vesmanov, Zhadko & Akopyan, 2014):

- 64% of respondents consider necessary graduates' year training on the basis of an educational organization;
- most of respondents consider important the existence of a graduate's portfolio in an electronic base of pedagogical higher education institutions for employers to choose an expert of the necessary profile for their organization;
- 58% of school principals suggest that the number of hours for students' practical training should be increased;
- 42% of managers consider necessary to develop future teachers' encyclopedic knowledge which would allow to adapt quickly to changes that occur in educational practice;
- 28% of respondents propose to shorten basic training and to pay more attention to special disciplines;
- among disciplines that employers consider necessary to include in curricula the leading ones are those that are in this or another way connected with communication in a team (15%): ethics and culture of business communication, business etiquette, conflictology;
- the next significant group of disciplines (14%) comprises business disciplines (management, marketing, economy);
- equal number of respondents (13% each) suggest to pay special attention to disciplines of a psychological cycle and special courses reflecting actual directions of educational activity;
- managers propose to enhance training in age and practical psychology though these disciplines already make part of curricula at pedagogical higher education institutions; besides they recommend to introduce a course for young specialists' psychological adaptation at a workplace;
- employers consider training in technologies according to new Federal State Educational Standards, differentiated approaches to training, methodology of project activity the most important directions of educational activity;
- legal disciplines (connected with educational law and regulatory basis of modern education system), and disciplines connected with information and communication technologies and extracurricular activities (10% each) enclose the rating.

The aim of modern pedagogical education is to train a highly qualified competent pedagogical personnel ready to carry out pedagogical activity (to set independently actual and perspective goals of education; to define the training contents according to the Federal State Educational Standard; to use modern technologies, active and interactive forms and methods of training; to project

variable programs; to carry out reflection, and to be responsible for pedagogical activity outcome) at a high professional level according to the teachers' professional standard in the context of current trends in education modernization.

Such high requirements for the teacher and their professional competence assume structural, content and organizational modernization of pedagogical education both at Bachelor's and Master's levels; Kazan Federal University is implementing these tasks. Kazan Federal University got its new structure in 2010 as the result of amalgamation of several higher education institutions including two pedagogical higher education institutions (2011); that made it one of the largest teachers' training centers of Russia (Kalimullin, 2014).

METHODOLOGICAL FRAMEWORK

Planning and implementation of modern teachers' vocational training is realized according to competency- and activity-based approach foundations of which are developed in works of Ananyev (1977), Vygotsky (1991), Zimnyay (2004), Leontyev (1975), Rubenstein (2000); they consider personality as the subject of activity that, forming in activity, communication and interaction with other people, specifies the nature of this activity.

In general, competence- and activity-based approach is an approach that focuses on education results expressed in competences; the process of competences development takes place in practice-oriented professionally directed activity.

We consider competence- and activity-based approach in the system of pedagogical education as an approach that is focused on a resultative side of education on the basis of its updated contents and in the course of practice-oriented professionally directed activity aimed to form a set of competences, specific professional actions of graduates trained according to programs of pedagogical training that allow to carry out pedagogical activity at a high professional level in compliance with teachers' professional standard in the context of current trends of education modernization.

A competence- and activity-based approach is such a methodological approach to planning and realization of pedagogical education from positions of which the process of its modernization is being implemented at present.

Today we are talking about teachers' professionalism and competence formation and development which are not specified by the amount of available knowledge but by abilities to use it creatively in practice in compliance with goals and conditions of a specified pedagogical situation on the basis of diagnostic goal-setting, valuable orientations and reflection, and ability to acquire new knowledge independently to use it in innovative pedagogical activities.

RESULTS AND DISCUSSIONS

Results of the existing practice analysis of master programs implementation for the training direction "Pedagogical education"

Training of subject teachers is carried out by profile institutes that enter the structure of Kazan Federal University (Institute of Management, Economy and Finance, Institute of Fundamental Medicine and Biology, Institute of International Relations, History and Oriental Studies, Institute of Physics, Chemical institute named after Butlerov, Institute of Mathematics and

Mechanics named after Lobachevsky, Institute of Philology and Cross-Cultural Communication named after Tolstoy, Institute of Psychology and Education).

The analysis of existing practice of master programs implementation for the training direction "Pedagogical education allowed to reveal a number of problems which can conditionally be divided into two groups.

The first group of problems is associated with an organizational structure:

- teachers' training is carried out at different institutes; there is no unified center responsible for training of highly qualified teachers;
- absence of unified ideology and strategy for teachers' training according to Master's degree;
- duplication of some master programs;
- insufficient practice-oriented master programs for school education;
- lack of flexible response to requirements of a regional labor market.

The second group of problems is connected with the content of available programs and principles of their planning:

- absence of modular principle at some master programs contents planning and at their realization;
- orientation of master programs to meet academic interests of chairs, but not requirements of school education;
- absence of reasonable balance between subject and psychology-pedagogical content of future teachers' training.

Now Kazan Federal University has to solve issues of structural, content and organizational modernization of master programs for the training direction "Pedagogical education"; this will allow to overcome or minimize the aforesaid problems.

Characteristic of a new organizational structure of Master in Pedagogy

The issues connected with general strategy elaboration and coordination of interaction of various profile institutes and educational organizations which train highly qualified teachers at a master level have been transferred to the unified center responsible for implementation of master programs. Subject training of future teachers is accomplished on the basis of profile institutes (Institute of Fundamental Medicine and Biology, Institute of Philology and Cross-Cultural Communication, Institute of Physics, etc.) that possess all necessary scientific, educational, personnel potential and material resources.

A psychological and pedagogical component of future teachers' training is realized on the basis of the Institute of Psychology and Education. Practical training of graduate students takes place on the basis of KFU lyceums and schools through real school-university partnership. Two specialized lyceums (IT lyceum and lyceum named after Lobachevsky) in the structure of Kazan Federal University and a wide network of demonstration schools enhance practice-orientated training and arrange effective experimental work aimed to develop and deploy own innovative technologies.

We consider necessary to single out variable trajectories for receiving Master's Degree in Pedagogy: 1) training of Bachelor's Degree students of a pedagogical profile to continue study to obtain Master's Degree in Pedagogy; 2) training of Bachelor's Degree motivated and focused on pedagogical activity students of non-pedagogical profiles. Variable models of teachers' training are realized at the expense of a variable part of the curriculum, including elective disciplines, studying of supplementary courses, and individual routes of

practice in compliance with the content of received education at a Bachelor level and available experience of master students' practical activities.

Besides, unification of disciplines that make a basic part of curricula of various profiles which are generally studied in the first year (1 semester) will allow masters' students to change their preparation profile during the first semester of training if necessary; this will increase variability of training and flexibly react to needs of educational practice in pedagogical staff of this or that profile.

Content characteristic of master programs aimed to train subject teachers

The basic part which includes disciplines directed to reveal modern problems of science and education, innovative processes in education, use of information technologies and a foreign language in educational activity, etc. is unified in curricula of master programs for pedagogical education.

The elaborated curriculum includes 4 modules:

Module 1. Educational process at modern school, psychological and pedagogical bases of its planning and implementation;

Module 2. Content of subject domain and training technologies;

Module 3. Individualization and differentiation of training;

Module 4. Monitoring of school students' mastering of a main educational program.

Modules include obligatory disciplines, elective disciplines, research work aimed to solve a specific pedagogical problem, and development of professional actions, corresponding practices (psychological and pedagogical practice, practice to obtain professional skills and experience of professional activity, research practice, externship).

Modules are directed to master a psychological and pedagogical component of training, content of specific scientific domain according to the program profile, training technique and technology, formation and development of general cultural, all-professional and professional competences; modules reveal the process of:

- educational space, educational programs, school students' individual educational routes designing,
- innovative technologies and training techniques used for each specific subject,
- technologies of school students' personality and team development,
- monitoring of school students' educational results,
- solutions of Olympiad tasks and problems of the unified state examination in a subject,
- development and use of innovative educational and methodical complexes,
- pedagogical interaction and management of conflicts in educational environment,
- creation of an electronic portfolio of graduate Master's Degree in pedagogy, etc.

- Forms of educational results presentations include:

Module 1 - development of the project "My personal educational and professional trajectory and perspective development", psychological analysis of a lesson and extra-curricular activity according to the FSES for general education and Professional S for the teacher, drawing up advance planning of team development on the basis of its complex psychological and pedagogical

characteristic, preparation of cases of specific practical situations (description of situations, their assessment, analysis, forecasting, possible solutions);

Module 2 – practice-oriented project work "Pedagogical Workshop", presentation of experience of project and pedagogical activity;

Module 3 – the first direction - design and implementation of professional activity individualization; the second direction - design and implementation of school students' individual educational routes;

Module 4 – presentation of monitoring activity experience, testing in the format of a unified state examination in a subject, presentation and maintaining of an electronic portfolio of graduate Master in Pedagogy.

Let us specify distinctive characteristics of elaborated programs for Master in Pedagogy:

- modular principle of designing within which the module represents an integrated, practical, theoretical, and research unit of an educational program directed to develop specific types of pedagogical activity and to form certain professional actions of the teacher according to the Professional Standard for the teacher;

- realization of a competence- and activity-based approach in teachers' training;

- optimum program design, logical and balanced structure of the program and curriculum (practice ratio, practice-oriented disciplines, theoretical lessons, etc.);

- reasonable balance between subject, psychological and pedagogical content of teachers' training;

- continuous vocationally-oriented practice of student's inclusion in real educational process on the basis of KFU lyceums and demonstration schools.

Advantages and possible risks of a new organizational structure of Master in Pedagogy

A new organizational structure of Master in Pedagogy will enable:

- to follow uniform ideology in the course of master programs implementation;

- to involve Russian and foreign scientists to implement master programs;

- to create a flexible system of enrollment according to regional needs of the Ministry of Education and Science of the Russian Federation and RT in teaching staff and this or that program ;

- to carry out standardization of master programs content according to the best Russian and foreign experience and requirements of educational practice;

- to eliminate duplication of master programs content;

- to order the process of practice organization on the basis of KFU lyceums and demonstration schools;

- to increase economic efficiency of educational process organization;

- to create a uniform basis of program educational modules, electronic educational resources, including distant and interactive training technologies;

- to elaborate a uniform system aimed to monitor the quality of program mastering and to involve employers in this process.

At the same time, it is necessary to figure out possible risks connected with the realization of the proposed organizational structure of Master in Pedagogy: gradual reduction of academic staff engaged in implementation of master

programs at profile institutes that will cause optimization of some chairs and dependence of master programs opening on needs of education system in highly qualified pedagogical staff that will result in creation of a "floating" regular structure of the chair responsible for the implementation of master programs in pedagogy.

The implementation of developed master programs for the direction "Pedagogical education" will allow to get the following effects:

- for master students – realization of an individual trajectory of vocational training, professional formation and professional development;
- for a higher education institution – improvement of teachers' training, ensuring its variability, flexibility, optimality, achievement of own brand recognition of master students' training in the market of educational services and labor market;
- for educational organizations – possibility to select highly skilled competent teachers to realize educational process.

CONCLUSION

Thus, Kazan Federal University has an important task in the context of pedagogical education modernization: to keep the best historical traditions and to carry out structural, content and organizational modernization of Master in Pedagogy in compliance with the target of pedagogical education at the present stage, namely: to ensure the quality of education and its correspondence to actual and perspective requirements of educational practice, formation of the set of common cultural, all-professional and professional competences of master programs graduates that enable to carry out pedagogical activity at a high professional level according to the Professional Standard for the teacher.

The authors specify that realization of the proposed structural, content and organizational modernization of a pedagogical magistracy in the context of a federal university will allow to increase the quality of teachers' training, to provide its variability, flexibility, and optimality, to achieve own brand recognition of master students' training in the market of educational services and labor market.

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