Profession-Oriented Pedagogic Training for Future Teachers under Conditions of Network Interaction with School

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Abstract

Activation person’s creative potential on the background of deepening democratization of social interaction is the brightest trend of society development in XXI century that stipulates transformation of practically all spheres of living environment and, above all, the sphere of education. Traditional approaches to education on every its level based on the priority of educational information transferring/uptake processes absolutely do not meet requests of intensively developing socium coming to collision with real demands of general educational services’ consumers. One of the important problems of pedagogic education in Russia is being insufficient practical training of future teachers for professional activity. In this connection the present article is dedicated to the problem of renewal of content of pedagogical training of future teacher of basic general school in accordance with new requirements to labour activity defined as Professional pedagogic standard and also to professional actions reflected in Federal state standard of general education. In the article there are model of substantial renewal of pedagogical cycle’s disciplines, improvement of their practical aspect on the basis of network interaction between educational organizations of general and higher education (school-university partnership). Authors suggest the content of “Disciplines of professional training” module and also give general trajectory for student’s actions aimed at its uptake. The represented model will be approbating in the Elabuga University of the Federal University of Kazan during 2015.

Keywords: practice-oriented education, network interaction, professional standard of the pedagogue, labour activity of pedagogue, pedagogue’s competences.

1. Introduction

The end of transition of general education system of the Russian Federation to new federal governmental educational standards (FGES), development and testifying of FGES general education, development of additional education assign the system of principally new requirements to competences of modern pedagogue. The aggregate of such requirements is reflected in the Standard of pedagogue’s professional activity (Professional standard of the pedagogue, 2013). Programs of pedagogues’ training in higher educational institutions existing today hardly provide formation of necessary competences of future pedagogues. Society of XXI century being informational in its very heart provides almost instant access to information of any type replacing the problem of information acquisition with the problem of its selection, application for solving set task and subsequent transformation in accordance with obtained practical results. Besides, plenty, diversity and dynamics of information define variability of its use depending on individual qualities of user bringing these qualities to the forefront. In educational activity all these cardinaly change the position of teacher, who ceased to be a transponder of knowledge and supervisor for their uptake and turns into moderator, tutor, designer of individual educational trajectories, educational tools, which provide formation of pupil’s competences necessary for personal solving of realized and subjectively perceived educational tasks. Training of such a teacher, provision of formedness of his basic professional competences that allow performance of pedagogical activity with account of qualitative renewal of requirements to teacher’s profession - is the most relevant task of system of pedagogical education.
On the assumption of the essence of professional competences the future teacher as a subject of educational process and its constructor in professional prospect shall master them as a result of individual creativity and self-development. One should understand that it is impossible to “deliver” the competences to student by means of traditionally organized teaching process, in which he acts just as a passive object. Professional becoming teacher starts from the moment of his entering higher educational institution and should on the present stage be performed in the course of practice-oriented educational activity defining position of student as active subject and equal participant of subject-subjective educational interaction. In the works of (Bolotova V.A, 2014; Khutorskoy A.V., 2007, etc.) it is stated that the competence is being the consequence of individual’s self-development, his technological and personal growth, consequence of self-organization and generalization of active and personal experience. The result of competent teaching is the elaboration of student’s personal style, his activity system, primarily, in professional area, what should indeed be estimated in the course of future teacher’s training effectiveness monitoring.

Another emphasis is put on the pragmatic aspect of teaching that causes the necessity of educational process integration with the methods of interactive teaching, practice-oriented and situational missions and tasks; increase of practices’ number; development of test for “minimal competence”, use of case-dimensions, etc.

The problems of practice-oriented education are discussed in the works of Russian and western scientists. Among Russian ones there are (Berlina S.A., 1999; Mychko E.I., 2005; Rettich S.V., 2004; Sazanova E.A., 2000; Yalalov F.G., 2014), while among foreign scientists there are (Griffiths V., 2007; Castling A., 1996; Petty J., 2004; Ramsden P., 2004; Reece I., 2006; Robinson W., 2006; Fish D., 1989).

The aggregate of concerned matters requires reconstruction of content and the very process of students’ training in basic area of disciplines of psychological and pedagogic cycle, enduing them with practice-oriented character, achievement of measurable education results in the terms of competences, resting upon interactive practices of education aimed not only at motivating students for external activity but also providing their creative self-development in professional field. The main goal of practical training of future teacher is the formation of ability to personal professional development that can be provided by network interaction of higher educational institution and school built upon the principles of school-university partnership.

2. Literature Review

The practice-oriented education represented as dynamically developing trend in the system of higher education, which has been actively implemented in educational programs of leading world’s universities since the beginning of 1990s is of special significance in modern pedagogic training. Its necessity was proven in provisions of “Agenda of XXI century” of 57th session of General Assembly of UN declared the decade will be the decade of Education for stable development, which is presented as process and result of forecasting and formation of human qualities - knowledge, abilities and skills, attitudes, style of people and communities' activity, features of character and competences providing constant increase of living standard (Campbell A., 1998).

Retrospective analysis of scientific literature witnesses that every epoch introduces own practice-oriented paradigm to pedagogical training of teacher filling it with corresponding ideas about character and content, methods and technologies of realization.


In this connection the point of view on modern education that appears to be important pertains to (Delors J., 1996), who has expressed it in the report addressed to UNESCO by International commission for problems of education in XXI century and named “Education: the latent treasure”. Delors distinguished four main principles of education: “to learn how to obtain knowledge” by combining enhanced study of disciplines selected by student with quite wide general cultural knowledge, what is being a kind of “pass” to sustained education; “to learn how to act” that implies not typical working or living, but also managing different situations, many of which cannot be forecasted; “to learn how to live unveiling own abilities” that means not to remain abilities that like treasures lay sleeping in every man (memory, ability to contemplation, imagination, aesthetic taste, ability to communicate with others); “to learn how to live in common” developing knowledge about other people and culture through their culture, traditions, values.

In summarizing report of (Hutmacher W., 1997) it is said that education should not be reduced only to theoretical knowledge and abilities, it should also include the experience of ability to act in practical situations.

It was just 1965 in Turin (Italy), when International Labour Organization (ICL) created international training center for module-type education that bases its work on the background of accurate analysis and description of activity,
functions and actions of worker of definite speciality. Evident educative and instructive materials (EIM) in national (Russian) literature referred to as “module of professional skills”.

Problems of practice-oriented education are also elaborated in the works of Russian scientists (Mychko E.I., 2005; Meseneva N.V., 2013).

Considering educative opportunities of practice-oriented training (Kalugina I.Yu., 2001) notes that didactic approach to teaching is based on the unity of emotional-imaginative and logical components of general content, acquisition of new knowledge and formation of practical experience of their use, emotional and cognitive components when performing creative tasks. As “the way of academic education” the present approach is interpreted by (Savitkaya A.V., 2013). In her opinion, it put emphasis not on educational disciplines but on original problems, which can and are dealt by future specialists, when to forefront we bring active education of small groups, but not traditional forms of teaching process organization. Another one researcher (Pavlova L.V., 2013) equates it to “method of teaching and learning that allows students to combine learning in higher educational institution with practical activity.

The goal of practice-oriented education is understood as formation of professionally and socially important competences in the course of acquisition by students of knowledge, abilities, skills and activity experience by (Yalalov F.G., 2001), who calls this type of practice-oriented approach action- and competence-based approach.

The central core of enhancement of practical training of students is the network interaction of higher educational institution with general education organization built on the principles of school-university partnership (Guruzhapov V.A., 2014).

In pedagogic science and practice the term “network interaction” became actively used in 90s years of XX century. According to definition of (Bugrova N.S., 2009), the network interaction is a new culture of joint activity implying readiness for partnership with conservation of own unicity, irreproducibility of cornerstone professional competences, aimed at mutual profit and real economical and social effect from cooperation of interested parties. Network interaction in the sphere of education as developing process is considered by (Glubokova E.N., 2015).

Network interaction of educational institutions, in opinion of (Kasprzhak, 2014) is the joint activity providing pupil with the possibility of mastering educational program of definite level and trend with use of resources of several (two and more) educational institutions. The participants of network interaction, according to their opinion, can be presented with legal bodies: general education institutions of elementary, secondary, higher professional education, additional education for children and adult persons and also non-governmental organizations.

Network interaction of institutions having common goals in educational area based on voluntary corporation of their resources is being more prospect trend in organization of network of educational institutions, main goal of which is the increase in education quality.

3. Methods and Data

To develop the model of content of pedagogic training of future teacher of basic general school we have carried out the questioning among students of fourth and fifth courses of the Elabuga Institute of the Federal University of Kazan studying by such directions of training as “Pedagogical education” and “Professional training”. The total number of respondents is 400 people.

The results of carried out questioning showed the important factors in choosing Elabuga institute of FUK by students are the following:
- availability of budget form of studying was mentioned by 90% of respondents;
- prestige of educational institution was specified by 80% of respondents;
- parents’ opinion is being priority factor for 50% of students;
- the magistral staff is of significance for 20% of respondents;

In addition, 45% of students expected obtaining both - theoretical and practical knowledge, abilities and skills, 35% of students expected for opportunity of successful job placement after graduating from higher educational institution, 20% of respondents just wanted to get diploma of higher education. Neither student had chosen such a variant of answer as acquisition of mere theoretical knowledge in higher educational institution.

When answering the question “Does higher educational institution provide facilities for job placement, doing practice by speciality and if the level of teaching is being of importance?” the data is the following: overwhelming majority of respondents (98%) are not satisfied with opportunities for job placement presented by higher educational institution, 20% of respondents just wanted to get diploma of higher education. Neither student had chosen such a variant of answer as acquisition of mere theoretical knowledge in higher educational institution.

When answering the question “Does higher educational institution provide facilities for job placement, doing practice by speciality and if the level of teaching is being of importance?” the data is the following: overwhelming majority of respondents (98%) are not satisfied with opportunities for job placement presented by higher educational institution, more than half of students (52%) discarded the opportunity of doing practice by speciality, 55% of questioned students note that for the current period of time theoretical knowledge prevail over practical, 45% more students declare they possess only theoretical knowledge.
The integration of theoretical knowledge and practical abilities and skills is the most preferential for students. This was specified by 60% of students. Neither of questioned students is interested in obtaining mere theoretical knowledge that would not be sustained with practical skills. Besides, more than half of respondents have confessed that the field practice organized by higher educational institution not always meet their requirements and in fact is being just formal report.

The majority of questioned students (80%) consider that acquisition of deeper practical knowledge, abilities and skills in the framework of higher educational institution will influence their job placement. At the same time all the students note the necessity of introducing deeper practical training to educational process.

Another one argument that witnesses insufficiency of practical training of future teachers for professional activity is the results of interrogation of employers. The questioning among directors of schools and their deputies in such cities as Elabuga, Mendelevsk, Naberezhnye Chelny, Nizhnekamsk of the republic of Tatarstan showed that 40% of graduates of pedagogical higher educational institutions are not ready to apply theoretical knowledge in practice, while 35% find it hard to conduct lessons and educational affairs.

4. Results

For the purpose of improvement of profession-oriented pedagogical training of future teacher we have developed the program of teaching module "Disciplines of professional cycle of basic training: construction and realization of educational processes", which is being a part of general professional educational program of applied bachelor’s degree course on direction of higher education training 44.03.05. “Pedagogic education” (bachelor’s level).

In the core of development of module’s program there are the following regulatory documents:

- Professional standard. Pedagogue (pedagogical activity in pre-school, elementary general, basic general, secondary general education) (tutor, teacher) - the order of the Ministry of Labour of Russia No. 544н as of October 18, 2013;
- Federal national educational standard of basic general education - the order of the Ministry of Education and Science of the Russian Federation as of December 17, 2010 No. 1897.

The module meets the requirements of Professional standard of the pedagogue, federal national educational standard of basic general education and defines main results and descriptors.

Besides, it is oriented at realization of requirements of federal national educational standard of higher education, which defines content of pedagogical activity:

- studying in the sphere of education in accordance with requirements of educational standards;
- organization of interaction with public and educational organizations, children’s collectives and parents, participation in self-management and school collective management for solving tasks in professional activity;

The novelty suggested by designers of module covers the following aspects:

- designing of program of module "from planned educational results";
- re-examination of content of disciplines, methods, means and technologies of teaching for the purpose of improvement of practice-oriented training of future teachers and increase of practice’s volume;
- development of new disciplines of basic and variative parts;
- building of module’s disciplines in accordance with definite logic and sequence promoting realization of cross-curriculum and intra-curriculum relations on the basis of organization of network interaction between educational institutions that realize programs of higher education and basic general education providing effective performance of “entering and finishing” school and higher educational institution;
- changing means and methods for appraisal of results of achieving by students of current, intermediary and final assessment by module.

The goal of module’s development is defined by authors as readiness for construction and realization of educational processes in general school at basic level.

Tasks:

- to realize axiological backgrounds for professional activity in the sphere of education;
- to perform construction of educational processes with account of individual-and-typological particularities of pupils;
- to use modern methods and techniques of teaching;
- to perform upbringing and moral development of pupils in class-room and extra-curriculum activity;
The characteristics of graduate learnt the present module:

- the constructor of basic educational processes of general secondary education able to independent selection and professional use of ways and means of their realization.

The person successfully passed the course can be:

- the constructor of general educational processes and programs;
- primary expert and consultant in the area of construction of general educational processes and programs.

The module “Disciplines of professional cycle of basic training: construction and realization of educational processes” can be an independent subdiscipline in case of educators’ occupational retraining and advanced training (subject teachers, classroom teachers, facilitators of educational work, educational work vice-principals, principals). The module is logically related to other modules of main educational program: “Disciplines of humanitarian and economic cycle: humanitarian and economic knowledge in educational practice” and “Disciplines of mathematical and science cycle”; is studied in parallel with classroom discipline of the module “Psychology and pedagogy of learners’ development: practice of person-oriented education” and is a basis for the module “Theoretical and experimental basics of teaching: teacher’s research and experimental activity” realization. International festival of school-teachers in Elabuga (held since 2010), which united academism of academic universities, research institutions, and practical (methodological) experience of school teachers, played a big role in developing education programs of module sections. Russian and foreign scientists holding workshop sessions, round tables, talent boutiques, discussion areas jointly with school teachers became like-minded persons in the search for efficient methods of teaching, mentoring and development of learners.

The main purpose of to-be teacher training is formation of ability to independent professional development, which can take place in network interaction between higher institution and school based on the principles of school-university partnership. Network interaction involves:

- development of selection criteria of organizations for participation in partnership;
- certification of a selected organization as a partner by pedagogical program implementation;
- contractual arrangements with a partner;
- development of coordinated academic documentations and practical training program on the partner’s base focused on formation of the list of professional competences corresponding to module tasks and requirements of pedagogue’s professional standard initial level.
- development of monitoring materials regarding professional competences formation estimation.

Coordination organization of interaction with an educational partner organization, monitoring and estimating student’s professional competences formation, formed competences recording in graduate’s e-portfolio, organization of reflection of student’s professional actions under formation, tasks statement and maintaining students’ scientific research focused on overcoming problem arising in student’s professional actions realization. Implementation of university’s interaction with an organization of general education based on principles of school-university partnership supposes fundamental reconsideration of traditional (to pedagogical education) approach within which the school as perceived as a university’s “little brother”. Currently, network interaction is one of powerful resources of education effectiveness increase. Within network interaction the link of theory and practice is consolidated in the process of module realization that will allow future teachers to apply theoretical knowledge and practical skills for successful beginning of work in school. The mechanism involves reflection, audit of educational process in school, mastering “pedagogical instruments”, which are transferred in teaching process in higher institution. In its turn, university can offer advanced training, widening the range of educational services, extending school educational space by means of including higher education institution departments, students in the process of training, etc.

As a result of learning the content of the module “Disciplines of professional cycle of basic training: construction and realization of educational processes” student’s competences are formed. These competences provide his commitment to exercise the following labour actions at basic level (Professional standard of the pedagogue, 2013):

Education labour actions.

ELA.1. Implementation of classroom disciplines programs within the basic general education program.

ELA.2. Carrying out of professional activity in accordance with requirements federal national educational standards of main general education.

ELA.4. Planning and carrying out of academic studies.

- to perform control and appraisal of educational achievements, current and final results when passing general educational program.
ELA.5. Systematic analysis of effectiveness of academic studies and approaches to teaching.
ELA.6. Organization of monitoring and evaluation of educational achievements, current and final results of mastering basic educational program.
ELA.7. Formation of universal educational actions (partially).
ELA.10. Objective assessment of students’ knowledge based on testing and others control methods in accordance with children’s actual educational abilities.

Upbringing labour actions (ULA).1. Regulation of pupils' behaviour with a view to ensuring secure educational environment.
ULA.2. Realization of modern, particularly, interactive forms and methods of educational work, using them both at lessons and during extracurricular activities.
ULA.3. Setting of educational objectives promoting the development of learners regardless their abilities and character.
ULA.4. Establishment and acceptance of clear rules of conduct by learners in accordance with educational organization's statute and internal regulations.
ULA.5. Implementation of educational programs.
ULA.9. Creation, maintaining practice, atmosphere and tradition of educational organization's life.
ULA.10. Development of pupils' cognitive activity, independence, initiative, creative abilities.
ULA.12. Use of pupils' parents' (official representatives’) constructive educational efforts in solution of child's education problems.

Development labour actions (DLA).1. Identification pupils’ behavioral and personality problems relating to their development features in the course of observation.
DLA.5. Rendering address help to pupils.
DLA.11. Formation of the system of pupils' conduct and activity regulation.

Labour actions of program implementation (LAOPI).1. Formation of general cultural competences and understanding of subject place in general worldview.
Duration of mastering the “Disciplines of professional cycle of basic training: construction and realization of educational processes” module program:

The module is of practice-oriented nature and consists of a number of educational events finishing divided practical training, i.a. introductory (business game “Image of successful teacher”, pedagogical workshops), intermediate (Admission to pedagogical profession), and certification (competition “The mosaic of pedagogical ideas”, “Pedagogical fair”). Students taking part in educational events held in higher education institution featuring teachers-supervisors and on their base gain labour actions defined by Professional standard of the pedagogue. Cooperation of higher institution and school allows creating common education space with a view to monitoring and auditing possibilities and needs of pedagogical practice and use of findings to increase future teacher’s training effectiveness. Besides, each of module sections is made according to logics of consistent plunging into disciplines mastering. It relates to the fact that each discipline of both basic and variative part brings a specific component in the system of labour actions developed within the educational module.

Educational content of the module includes content of classroom disciplines, which collectively provides the student with an opportunity of necessary professional actions, knowledge and skills formation at maturity level, related to realization of labour functions (General pedagogical. Teaching, Educational activity, partially Development activity) of future teacher. Implementation of the module is based on practice-oriented, assignment and person-oriented approaches. Passing a series of educational events, professional tests a student will pass stages of his personal and professional generation: from a reflexive pedagogue to a pedagogue-practician actualizing in the system of four aspects of knowledge digestion: 1. to get; 2. to understand; 3. to apply; 4. to transform. An educational event is understood as a part of integral educational process, which is result of predecessor events and cause of subsequent ones and provides entering module's educational space and way out.
5. Discussion

Findings given in this paper are consistent with data represented by a number of researchers to some or other extent (Kasprzhak, 2014; Margolis A.A., 2014). Organization of educational process by the module “Disciplines of professional cycle of basic training: construction and realization of educational processes” is carried out in accordance with the program and logic of module expanding under the conditions of network interaction with school. Studies in higher education institution, teacher’s consultative assistance and practical training in network school is organized in such a way to provide execution of basic professional bachelor degree educational program on direction of training “Pedagogical education” (bachelor's level).

At the first stage studying module content involves getting to know realization of professional actions under formation in the context of introductory training, in some cases carrying out individual professional tests and statement of a list of theoretical issues and pedagogical problems (tasks), the solution if which is necessary for successful of a professional action under formation (labour function). At the second stage of module mastering (in the process of stated pedagogical problems solution) students adopt theoretical content represented by a complex of classroom disciplines, but interrelated with common ground of a professional action (actions) requiring knowledge of this content. Classroom disciplines of the module are studied as a search for answers to questions put at the first stage of module studying (introductive training stage, in the form of decision making regarding certain pedagogical problems and tasks formed upon its completion in the form introductory educational event into a discipline), creating conditions for listener's conscious attitude to studied theoretical material. At the third stage of studying the module may include necessary methods, techniques training, i.e. specific ways of professional actions realization under conditions of specially organized educational laboratory environment (laboratory course, college laboratory). This stage is focused on professional action modeling, i.e. its studying and mastering in a model (and in this case simplified compared to real) situation. At the fourth stage of studying the module testing of adopted professional action in the context of a real educational organization under conditions of specially organized reflection takes place. The objective of this stage (practical training) is an analysis of mastering professional action by students in real educational environment, accuracy control and estimation of its formation.

6. Conclusion and Final Considerations

The gap between theory and practice is one of main drawbacks of current professional educational programs implemented when training teachers. When designing new basic professional programs developers rely on the key statement: in the process of professional training it’s necessary to maintain the balance between students’ theoretical knowledge and teaching based on practice. Improvement of the relation between theory and practice in basic professional educational programs of pedagogic education will allow future teachers to use both types of knowledge for successful carrying out professional actions in school.

It can be achieved by means of increase in credits number in practice:

a) thematical practices of educational module focused on mastering professional actions (at least 20 credits introductive, educational – in a separated form) are defined by corresponding module objective and content; b) long-term practical training (at least 25 credits), focused on mastering holistic professional activity in accordance with basic professional educational programs objectives.

Thus, practice:

1. allows mastering separate professional actions within an educational module;
2. practical training allows carrying out:
   a) synthesis of professional actions into holistic professional activity;
   b) “imbedding” a student into school social environment.

The main objective of practical training of future teacher is formation of ability to independent professional development, i.e. development of his activity in new and each time unique situations.

To apply this practice-oriented approach in realizing basic professional educational program it's necessary to construct new system of school-university partnership functioning based on network interaction.

To implement the module “Disciplines of professional cycle of basic training: construction and realization of educational processes” university teaching staff has practical experience of modern educational technologies use, working experience with the system of advanced training and high level of knowledge of their subject. For example, “The phenomenon of pedagogical activity”, “Educational process management”, “Educational cognitive activity management” and also disciplines of a variative part of the module involve the use of concentrated training technology or the method of
“dipping into a subject” (Pedagogy department professors have many-years experience of this technology use), context training, and also methods and forms of interactive training (topical lectures, visualization lectures, binary lectures (lectures for two persons), press conference lectures, conversation lecture, discussion lecture, lectures with pre-planned mistakes, mini-lectures, structures and manageable discussion; brainstorm, synectics; case study and case study analysis; role playing; communicative tasks and exercises, presentations and self-presentations; analytical exercises; games simulations, imitation games; business games fragments; video presentations and videoanalysis of participants’ behaviour, etc.)

A school teacher taking part in educational module implementation under conditions of network interaction exercises not only teacher’s traditional position but role actions: supervisor’s, facilitator’s, organizer’s, who supports and consults student, provide him with an opportunity to reflect his professional actions and his professional behaviour.

Pedagogical personnel, who manage practical training, have deep knowledge of age related and individual peculiarities of children and teenagers, possess diagnostics technologies of children's development level and dynamics, correctional and developmental activity, have experience of establishing contacts with participants of network interaction.

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