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Formation of Professional Competences of "Primary Education" Profile Students While the Studying Process at the University

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Abstract

The relevance of this research is due to new approaches to higher vocational education, to the training of bachelors, specialists, students of primary education: from getting reproductive knowledge which is aimed to frontal forms of work with students, it is necessary a student-oriented approach, based on the ideas of personality-based semantic development priorities, regional experience personality, pedagogical support of individuality. The purpose of the article is to study and develop the science-based methods of professional competences formation among the undergraduate students of "Primary Education" profile, based on personality-centered approach, understanding the value of professional self-realization by students. A leading method of this problem study is a pedagogical experiment (ascertainment, formation and control stages) as well as the method of expert estimations, statistical processing of the quantitative results of the study. The main results of the research are the formation technique of professional competences of undergraduate students, based on personality-centered approach; the definition of the concept "professional-pedagogical competence". Model of a student-centered approach to teaching professionals of primary education is characterized by the relationship of the motivational, organizational-planning, content-activity, reflexive-evaluation, communication-organizational components. Their severity degree determines the levels of students' professional competencies (low, medium, high). Materials of this article may be useful for teachers of higher educational institutions by the application of this methodology of professional and pedagogical competences' formation of students in the educational process at the University.

Keywords: undergraduate students, professional competence, personality-oriented approach, primary school teacher

1. Introduction

One of the latest ideas in the introduction of Federal State Educational Standards into the Russian education system is the idea of formation and development of students' professional competences. In the Federal State educational standard are determined following main groups of professional and pedagogical competences:1) general cultural competences, including the ability of perception, generalization of the information, setting goals and choosing the ways of their realization, understanding the importance of culture as the form of human existence; 2) general professional competences, including the ability to realize the social significance of the future profession by the students, the ability to use systematic theoretical knowledge of humanities, social, economic sciences by solving social and professional 3) professional competences, including the ability to implement educational programs, to apply modern technologies and methods of training and education; 4) competence in the field of cultural and educational activity (State educational standard of higher professional education, 2010).

Under the guidance of V. Shadrikova was designed "Model of the specialist with higher professional education", in accordance with which a modern specialist should: 1) be able to translate their knowledge into innovative technologies, turning new knowledge into concrete proposals; 2) know how to provide access to global sources of knowledge; 3) have motivation to learning (a specialist should be able to "learn"); 4) own methodological knowledge and analytical skills; 5) research skills; 6) possess the basic knowledge and skills; 7) have the ability to carry out written and oral communication, team work, adapt to change, to promote social cohesion; 8) own values for living in a democratic society; 9) develop in all aspects of intellectual potential; 10) know modern information technologies (Shadrikov, 2003).

In this way, the competence includes not only the content but also the procedural component. The teacher should be ready for the Organization and various types of educational activities which, to a great extent, determine the level of professional and pedagogical competence of the teacher. Pedagogical competence is a product of self-education, self-improvement, self-development of the future specialist.

"Self-determination includes its own software-oriented choice of methods, techniques, methods and approaches in the implementation of professional activities, as well as the personality-oriented choice in socially-directed actions and deeds" (Zakirova & Koletvinova, 2014; Masalimova & Sabirova, 2014).

Its formation and development is associated with the development of the fundamental abilities of the student such as perceptual, communicational, organizational, engineering, research, that is, those abilities that allow the practice of educational activity (Elagina, 2010).

2. Materials and Methods

In studies of N. S. Rozov the problem of professional competence of the specialist was regarded as a set of three aspects:

1) semantic as including adequate adequate understanding of the situation in the general cultural context ,it means in the context of cultural understanding, relationship, samples of evaluation;

2) problem-practical for recognition of situations, adequate setting and effective implementation of the goals, objectives, standards in that situation;

3) communicative, concentrating attention to adequate communication in situations of cultural context and about such situations, taking into account the respective cultural patterns of communication and interaction (Rozov, 1996).

Approach of N. S. Rozov underlies the development of the State educational standard for specialists of any profile, as it reflects the same aspects of his training (Rozov, 1996).

Thus, the concept of **"**competence**"** involves a complex compound content that integrates professional, social-pedagogical, social-psychological, legal, and other characteristics. In summary, the specialist competence is a set of abilities, qualities and personality traits which are necessary for successful professional activity in a particular area.

Vocational-pedagogical competence of the teacher is not a simple aggregation of subject knowledge, knowledge of pedagogy and psychology, skills to conduct lessons or extracurricular activities. Feature of vocational-pedagogical competence as a teacher's readiness to pedagogical activity is that it is acquired and is manifested in specific psycho-pedagogical and communicative situations, in situations of real challenges which constantly emerge in the educational process of the school.

Competence is not simply the possession of knowledge, but rather, the potential readiness of the teacher to solve problems of different levels of complexity skillfully. Thus, the competence includes not only the content but also the procedural component.

The teacher should be ready for the organization and realization of various types of educational activities which, to a great extent, determine the level of professional and pedagogical competence of the teacher.

The specificity of teaching activity does not allow duplicate competence, it is impossible to "give" it students in the framework of the traditional training at high school. Pedagogical competence is a product of self-education, self-improvement, self-development of the future specialist. Its formation and development is primarily associated with the development of the fundamental abilities of the student such as perceptual, communicational, organizational, and engineering, research, those abilities, which allow carry out teaching activity.

Experimental work over the development of professional competencies of students-Bachelors was carried out during the 2012-2013 and 2013-2014 school years on two fronts. The first direction was to study the value orientations of students of bachelors. The second direction was exploring of the relation of students to the profession of elementary school teachers during their teaching practice.

Since September 1, 2012 till December 25, 2013 we experimented with a group of students-undergraduate of the first year studying "Teacher education" direction "Primary education" profile (Bachelor's degree).

The experiment involved 21 people: 20 girls and 1 boy. Experimental work was held in three phases. On the first stage of the experiment-ascertaining (September, 2012.) was organized a survey in the group of 21 students to determine the level of preparation for the teaching profession at primary school. The aim of the first phase of the experiment was to determine students core values, select the hierarchy of values among the students of the I year

of studying. Method of research was the system of value orientations of M. Rokich, which defines the content side of the person's focus, his relation to the surrounding world, to others, to himself, the philosophy and the core motivation of the vital concepts and "philosophy of life". Terminal values are believes that the ultimate goal of individual existence is worth seeking; instrumental values are convictions that a particular action or a person's quality is preferable in any situation. Analyzing the hierarchy of values, we pay attention to their grouping of subjects in meaningful blocks on different grounds. There are "specific" and "abstract" values, the values of professional self-realization and personal life.

At the beginning of the 2012-2013 school year the 1 year students were offered the terminal values (18 values). In the list of values the students gave a rank number to each value according to their convictions. We have identified the following levels of value orientations of students: 1) high-from 1 up to 6; 2) medium-from 7 to 12; 3) low level, ranging from 13 to 18.

The results of the study on the first stage of the experiment led to the following results. On the first place students had personal values (love, good and faithful friends, high material status). On the second place there were "abstract" values: freedom, joy, responsibility. On the third place were the values of professional self-realization:

1) "Active life" (emotional fullness and richness of life) took the 7 place among 53% of respondents, the12 place among 30%, the 1 place among 17% of respondents;

"Interesting work" took the 4 place among 34% of respondents, the 11 place among 35% of respondents, the 2 place among 31 % of respondents

3) "Cognition" (ability to extend their education, knowledge of general culture, intellectual development) the 10 place among45%; the13 place among 25%; the 3 place among 30% of respondents;

4) Productive life (using of capacities, powers and abilities) took the 11 place among 56%; the 8 among 15%; the 4 among 29% of respondents;

5) Development (work on oneself, the continuous physical and spiritual perfection) took the 12 place among 44%; the 15 place among 23%; the 3 among 33% of respondents;

6) Creativity took the 17place among 32%; the 9 place among 26%; the 5 place among 52% of the respondents.

Thus, the survey revealed rather low professional values level of the 1 year students.

In the second phase of the pilot project (October, 2012 to December 2013 y.) was held individual and group work with students. The aim of this phase were: 1) changing the attitude to knowledge and creativity as the fundamental values of the primary school teachers; 2) priority of active life and development, self-development in the learning process and extra-curricular activities of the students.

During the 2012-2013 school year was carried out individual work with students, the results of which have been recorded in the student's identity card.

During the second phase of the pilot project students did 3 types of experimental work: partial-search, creative-reproductive and creative. For the course "Phonology" (1 semester) students did exercises, based on data collection, classification and systematization of the data on the target process or phenomenon.

During the second year at high school the second year students continued training based on personality-centered approach. At the stage of the formative experiment, students performed the task of theoretical generalization and design, the design task. These tasks were connected with analysis, synthesis, synthesis of empirical data and hypotheses; the design of theoretical model research, experimental setup, abstraction, forecasting, designing.

In the process of studying of a course of "Children's literature" (3 semester) students have been given the task to work in the creative team (creative groups with 5-6 people):

1) Learn the content of the textbooks of literary reading. Complete the classification of children's folklore.

2) Make a table of "Classification of children's folklore in the textbooks of the literary reading".

3) Learn the content of the textbooks of literary reading. Make an oral presentation "Topics of proverbs and sayings in the textbooks of the literary readings".

4) Find lullaby folk songs for young learners in the books of literary reading. Determine the means of artistic expression in lullaby songs.

5) Find the tongue twisters studied by pupils in primary classes; the articulation of the sounds; What is the topics of tongue twisters; what moral values the tongue-twisters have.

The second year students (3semester) did following engineering tasks, working in small creative groups:

1) To make a script of an extracurricular activity by children's game folklore.

2) To prepare the extracurricular activity with the young learners and to show it their parents.

3) To analyze the event at the meeting of school methodical association of primary school teachers and at the parents' meeting.

4) To make a questionnaire for students of this form "What I have learned while the preparation of that extracurricular activity".

5) To make the album of that activity together with young learners.

The third phase of experimental work-checklist-took place in December 24, 2013. 2 year students were asked 18 questions on a questionnaire by m. Rokich: the A-block (terminal values) and to determine the most significant values by assigning them with a rank number.

The survey of the 2 year students showed the following results:

1) "Active life" (emotional fullness and richness of life) took the 1st place within 51% of respondents, the 4 place within 37%, the 5 place within 12% of respondents;

2) "Interesting work" took the 1 place in 48% of the respondents, 34 percent had the 2 place, the 4 place had 18% of respondents;

3) "Cognition' (ability to extend their education, knowledge of general culture, intellectual development) took the 1 place within 15% of respondents; the3 place within 43% of respondents; the 7 place within 42% of respondents;

4) "The productive life" (the fullest possible use of its capacities, powers and abilities) took the 2 place within 47% of respondents; the 4 place within 34% of respondents; the 7 place within 19% of respondents;

5) "Self-development" (work on oneself, the continuous physical and spiritual perfection) took the 2 place within 53%; the 3 place within 57% of respondents; the 4 place within 66% of respondents;

6) "Creativity" took the5 place within 75% of respondents; the 6 place within 52% of the respondents.

Thus, the test phase of the experiment revealed significant changes in the structure of the hierarchy of values of the 2 year students. First place in the hierarchy of values took the value of professional activity.

3. Results

The results of experimental work allow us affirm that many students noticed for themselves the importance of individual and abstract values on the status stage of the experiment (2012). Professional values have taken the third place in the system of value orientations. Active life took only the 7 place among 53% of the respondents have a place and the 12 place among 30% of the respondents from 18 values; knowledge took the 13 place among 25 % of the students and the 10 place among 45 % of students;; creativity took the 17 place among 32 % and personal development of students took the 12 place among 44 %.. After the formative experiment evaluation of professional values of students has changed. Checklist stage of experiment (2013, 2005) has shown that the 2 year students prefer creativity: the 2 place among 75%, and development (57%), and cognition (43%), the active life (88%) of the active and exciting work of primary school teachers (82 per cent).

A second experimental work was carried out during the period since September to May 2013-2014 school year. We have researched the problem of professional and pedagogical competence formation among the 2 year undergraduate students of the psychology and Education University KFU and came to the conclusion that its development is especially effective in pedagogical practice.

To investigate the level of pedagogical competence was held a survey among the 2 year students at the beginning of the pedagogical practices and after it. The questionnaire had questions of the following groups:

1 block - meaning:

- Do you consider priority of scientific-theoretical and methodological training of primary school teachers?

- What do you think is the most important in the teaching profession?

- Why did you decide to choose the profession of teachers of primary classes?

- Is systematic work important to improve the teachers' skills?

2 block – problem-practical:

- What will you do when the same pupil systematically violating discipline in the classroom?
- What will you do as a teacher, if a student in your class does not do his homework regularly?
- How do you evaluate the control work of your student, if it has been cheated?
- Do you think that it is necessary for teachers of primary classes to keep the diary of observations?

3 unit-communicative:

- Do you think that it is necessary to keep distance in communication with young learners?
- How will you communicate with the student, who apparently ignores the teacher at the lesson?
- What action will you take in relation to the pupil, which is disrespectful to girls?
- What communication skills should the primary school teacher have?

Analysis of the results of the survey showed that the significant signs of competence are: about 62% of students begin to accept future pedagogical activity as the scope of their self-realization after passing the practice, to be aware of their educational and professional opportunities, become more confident in their actions. The undergraduate-students have a positive attitude to the profession and motivation to master it; up to 60% of the students have mastered the orienting basis of pedagogical activity, which includes not only the image of the result of their activities, but a process of its achievement; over 80% of the students experienced i different ways of solving the issues of professional tasks that are part of the structure of pedagogical competence as its basic competence (analytical, organizational, engineering design, communicative, self-educational and etc.). Most of the students have mastered the ways of reflection, self-control, self-evaluation of their actions, using their criteria and indicators for the effectiveness of pedagogical activities. In our view, these signs harmonic indicators can be considered to be sufficient for the future professional activity level of competence.

4. Discussions

The number of researchers worked over the problem of professional competence formation**.**

N. V. Kuzmina considers professional competence of a teacher as his awareness and credibility, targeted primarily on productive formation of the identity of individuality. (Kuzmin, 1990). Vocational-pedagogical competence, by Kuzmina, includes five elements or types of competence: the special pedagogical, methodical, socio-psychological, differential psychological, autopsihological (corresponds to the notion of a professional self-awareness, self-knowledge and self-development).

A. K. Markova clarifies the definition of professional competence as “mental state to act autonomously and responsibly, the possession of ability to perform certain duties of the human’s labor” (Markov, 1996).

In understanding of N. D. Khmel Professional competence of the teacher is the unity of its theoretical and practical commitment to the implementation of educational activities (Khmel, 1998).

Y. Vardanyan believes that professional competence of specialists with higher education is a complex system of internal mental States and properties of individual specialist: his willingness to exercise professional activities and abilities (i.e., skills and capabilities) necessary for this action (Vardanyan, 2008).

In studies N. S. Rozov the problem of professional competence of specialists was regarded as a set of three aspects: 1) semantic; 2) problem-practical; 3) communicative (Rozov, 1996).

An indicator of professional competence, according to the American approach to address the issue of professional competence is the relationship between professional character traits and done work. The further study of the problem of professional competence by American scientists is cognitive.

D. Mcclelland defines competence as a “personal characteristic which, combined with others, allows to perform a specific task in the Organization” (Mcclelland, 1973).

In research of the scientist V. F. Gabdulkhakov the concept of professional competence is related to the personification of individuals (Gabdulhakov, 2014), with the need to individualize instruction and education, providing opportunities for intellectual and creative growth of individual student’s trajectory within tution (Gabdulhakov & Kalimullin, 2014). Scientist believes that an essential component of the modern expert is t′ûtoring of creative activities. He developed the components of pedagogical technology (Gabdulhakov, 2014).

V. F. Gabdulhakov explores the conditions for the development of the student’s research functions undergraduate student of the University (Gabdulhakov, 2014). Scientists propose a new model for teachers training in modern universities (Gabdulhakov & Kalimullin, 2014).

The aspect of the methodology of formation of professional competences of undergraduate students was not researched in previous studies.

In our view, the method of formation of professional competences of undergraduate students should consist of the following components: testing students by the method of Rokich on the 1-4 years at the University; survey of students with the aim of definition of their future profession, specialist teacher of primary education; psycho-pedagogical support undergraduate students, in all phases of education at the University; Organization of pedagogical practice for undergraduate students at schools on the profile of the "primary education"; systematic participation of students at research work.

5. Conclusion

Dynamics of obtained results showed positive changes by selected criteria, confirmed our hypothesis, and has allowed draw a number of conclusions.

Personality-oriented approach in preparing students of profile "primary education" is the process of creating the conditions for building an individual route of independent work by a student to raise the level of his training through the establishment of subjective position. Model of a student-centered approach to teaching professionals primary education is characterized by the relationship of the motivational, organizational, planning, content-destruction, reflexive and evaluation, communication-organizational components. The degree of their severity identifies levels of professional competencies of students (low, medium, high).

The impact of professional competencies of students based on personality-centered approach model provides a set of conditions: 1) external: to update individual experiences of students, providing opportunities to build individual route of self-employment, information-methodical provision of independent work, creating situations that promote reflection through self-examination, self-assessment; 2) internal: the level of motivation to work independently; need for self-education; reflexive relation of students to learning activities; adequate self-esteem, educational achievement.

Thus, the most important mechanism of professional formation and growth of the future teachers is the individualization of their preparation. The principal feature of personality-centered approach is to search for and update the internal resources of each individual subject of the educational process.

So, on the basis of our experimental work we consider the notion of "professional-pedagogical competence" as a set of professional and pedagogical competences, including the availability of knowledge, professional and life experience, the focus of the individual teacher, ability to act in a particular situation, to resolve professional tasks of varying complexity and uncertainty, its willingness to achieve high quality results of their work, attitude to his profession as a value.

6. Recommendations

Materials of this article are of interest for teachers, University professors, engaged in the education and training of undergraduate students, the formation of professional competences of students, graduate students, undergraduates who are interested in the problem of teacher training.

References

Elagina, V. S. (2010). Becoming of pedagogical competence of students of pedagogical institute of higher. *Modern naukoemkie technologies*, *10*, 113-116.

Gabdilkhakov, V. F., & Kalimullin, A. M. (2014). Tutoring of pedagogical activity and new ideology of teacher training in the higher education institution. *Life Science Journal*, *11*(11s), 183-187.

Gabdulchakov, V. F. (2014). The Problems of Language Personality Formation in Russia (the Analysis of Language Processes and Pedagogical Technologies) Procedia—Social and Behavioral Sciences. *Third Annual International Conference "Early Childhood Care and Education"*, *146*, 158-162.

Gabdulkhakov, V. F. (2014). Personification of Multicultural Education in the Universities of Russia (Analysis of Training Specialists for Kindergartens) Procedia—Social and Behavioral Sciences. *Third Annual International Conference "Early Childhood Care and Education"*, *146*, 129-133.

Hop, N. D. (1998). *Theoretical bases of professional preparation of teacher* (p. 319). Alma-Ata: Gylym.

Kuz'mina, N. V. (1990). *Professionalism of personality of teacher* (p. 149). Moscow: Academy of pedagogical sciences.

Markov, A. K. (1996). *Psychology of professionalism*. Moscow: Inlightening.

Masalimova, A. R., & Sabirova, L. L. (2014). Multi-dimensional classification of types and forms of corporate education. *American Journal of Applied Sciences*, *11*, 1054-1058. http://dx.doi.org/10.3844/ajassp.2014.1054.1058

McClelland, D. C. (1973). Testing for competence rather than intelligence. *American Psychologist*, *28*(1), 1-14. http://dx.doi.org/10.1037/h0034092

Rozov, V. S. (1996). Values of liberal education. *Higher education is in Russia*, *1*, 81-89.

Shadrikov, V. D. (2003). *Model of specialist and higher professional education* (p. 57). Moscow: Enlightening.

Vardanyan, Y. V. (2008). Development of professional competence of student as subject of pedagogical intercourse in the process of study of psychology. *Integration of education*, *4*, 38-44.

Zakirova, V. G., & Koletvinova, N. D. (2014). Paradigm of vulture primary school teachers' vocational training. *Life Science Journal*, *11*(4), 441-447.