

Интернет-журнал «Мир науки» ISSN 2309-4265 <http://mir-nauki.com/>

2017, Том 5, номер 1 (январь - февраль) <http://mir-nauki.com/vol5-1.html>

URL статьи: <http://mir-nauki.com/PDF/39PDangMN117.pdf>

Статья опубликована 18.03.2017

Ссылка для цитирования этой статьи:

Фоминых М.В. Роль проблемного моделирования в профессиональном становлении студента // Интернет-журнал «Мир науки» 2017, Том 5, номер 1 <http://mir-nauki.com/PDF/39PDangMN117.pdf> (доступ свободный). Загл. с экрана. Яз. рус., англ.

For citation:

Fominykh M.V. [The role of problem modeling for the students' professional development] On-line Journal «Mir nauki», 2017, Vol. 5, no. 1. Available at: <http://mir-nauki.com/PDF/39PDangMN117.pdf> (In Russ.)

Fominykh Maria Vyacheslavovna

Russian state vocational pedagogical university, Russia, Ekaterinburg
E-mail: Fominykh.maria12@yandex.ru

The role of problem modeling for the students' professional development

Abstract. The main characteristics of the individual functions in the overall structure of teacher's activity are described in suggested article. Relevance of this article determined by that feature of the teaching in today's schools is largely determined by the increasing of the quantity of information, constant modernization and sophistication of educational programs. In this regard, a serious rethinking is subjected for the traditional process of university studies in general and educational activities of the students that determines the necessity of searching of training methods, contributing to the development of teaching abilities, as well as the active position of the student in this process. Among the methods which develop the teaching abilities of students in their learning process we can stand out the problem modeling. The author defines the role of problem modeling in the professional development of student of vocational pedagogical university. The author reveals the concept and essence of pedagogical abilities of students of vocational-pedagogical educational institutions through the qualifying characteristics of the future teacher-professional and core competencies as a generalized methods of educational activities to ensure productive performance of professional activities. The main characteristics of vocational-pedagogical university, such as scientific understandings of professional orientation in the entire educational process, successfully solving the problems of preparation for immediate professional activity and forming of competitiveness of a teacher are suggested and described in the article.

Keywords: problem modeling; professional development; professional activity; vocational-pedagogical activity; pedagogical skills; problem-model approach; competence approach

To determine the role of pedagogical skills in professional formation of the student of the professional-pedagogical university we should consider the functions of professional and pedagogical activities.

E.F. Zeer says, the value of any activity can be understood only by viewing it through the prism of the objective data of social functions. The term "function" he determines as homogeneous group of steadily recurring activities, the implementation of which is typical for this category of professional and pedagogical workers [4, 5]. On the basis of studying pedagogical activity of teachers of vocational schools E.F. Zeer distinguishes two groups of functions: targeted and operational. The first group

includes the functions of implementation that are aimed at achieving the main professional goal - job training and formation of the person and professional, i.e., training, educative, developing and motivating functions... Their implementation is ensured by a system of operational functions: designing, organizational, gnostic, communicative and production-technological. The first four are characteristic of the teacher of any educational institution, the latter - only for the teacher of a vocational school, and it is the peculiarity of professional-pedagogical work.

Learning function, according to the scientist, is one of the leading functions in the teachers' activity. Its meaning lies in the formation of the system of professional knowledge and skills of the trainees. The upbringing function of teachers consists of the social and professional education of pupils. The developing function is the mental development of the students' personality: their sensorimotor, intellectual and emotional-volitional spheres. The methodological function is aimed at training, maintenance and analysis of the educational process. The validity of its distinguishing is determined by the peculiarities of pedagogical activity of the master and the teacher. The production-technological function, according to E.F. Zeer, is a specific function, characteristic of teachers of vocational schools. The organizational function is realized in the course of professional educational process and fostering work. Another important function of teachers is the diagnostic one.

Thus, according to E.F. Zeer, analysis of professional activity trainers and teachers allows to distinguish three functions-objectives: training, raising and developing - and the four functions-operations: methodological, production-technological, organizational and diagnostic [4].

R.S. Nemov makes strict demands to the personality of the future teacher. Among them the key ones can be differentiated, without which it is impossible to become a qualified teacher or educator, and minor, compliance with which is not necessary for the teacher, but it makes the person able to train and educate the other person in the best way possible. Both the major and minor requirements are related to the psychology of activity and communication of the teacher, to his abilities, knowledge and skills useful for training and education of the children. Both among the top and other psychological characteristics required for a qualified teacher, there are stable, permanent characteristic of teachers and educators of all ages, times and peoples, and volatile, conditioned with the peculiarities of this stage of social and economic development of the society where the teacher lives and works [10].

As noted by V.G. Gaifullin [3], a well-known developer of the competency approach in training, competitiveness plays an important role for a specialist in the labor market. What is the case with the teachers? The National Doctrine of Education of the Russian Federation emphasizes the need to further improve the education system and the quality of training and qualifications of teaching staff. Therefore, the systematic improvement of the whole sphere of training teachers and other people in educational institutions is an objective necessity. Life issues fundamentally new challenges constantly demanding the revision of the traditional approach to changes in the content and methods of teacher training, their implementation in a genuinely scientific manner. Professionally-pedagogical institute of higher education is an educational institution which purpose is the production of a competent in his own field specialist as the full developed personality; this is a school, where training is aimed at the mastery of certain skills and knowledge in a chosen specialty. Thus, we should consider the functions of the teacher without completing which the graduate of professional-pedagogical high school will not be competitive. According to many research, activities of teachers are made up of eight leading complex and intertwining functions, the execution of which provides the effect of education and training of students. Let us consider the substantial characteristics of the individual functions in the total activity of the teacher.

1. Informational function. The main task of educational work of the teacher is to equip students with the knowledge of the sciences' fundamentals.

2. Developing function. Both informational and developing function provide a solution not only educational, but also upbringing problems. Education takes on the developing character due to the targeted management of mental activity of students in the educational process.
3. Orientation function. This teacher's function is mainly realized through the activities of upbringing plan. The nurturing role of teachers implies purposeful activities aimed at the assimilation of social experience, a certain system of socially significant value orientations by the students.
4. Mobilization function. This feature appears in the work of the teacher aimed at application to practice the knowledge gained by the students. It is associated with the development of skills, promoting the development of students. Hence its name is mobilization.
5. Constructive function. In pedagogical terms, this function of the teacher is related to the selection and composition of the content material of the subject being studied, the design of the educational process, the planning and construction of the work system.
6. Communicative function consists in establishing the right relationship with individual students or student groups; with the students' parents; with individual teachers, administration and the whole school community; with foreign colleagues.
7. The organizational function of the teacher is related to the structural and communicative activities. The future teacher must possess certain organizational skills.
8. Research function. The task of the teacher training also includes providing the students with the scientific method of thinking and research of pedagogical processes and phenomena. As a result of these tasks, the teacher should possess certain knowledge, skills and abilities of research (knowledge and skills to analyze a lesson; the ability to observe ("see") pedagogical processes and phenomena; knowledge of the simplest methods of handling pedagogical experiment data).

As already mentioned, the competence is a generalized means of action to ensure productive performance of professional activities. This is the human ability to fulfill their competence. Since the implementation of competence occurs during a variety of activities to solve the theoretical and practical problems, there are also motivational and emotional-volitional components in the structure of their activity (procedural) knowledge and skills. An important part of competence is an experience - integration of the separate actions, learned by the man, methods and problem solving techniques into a single unity. Competencies of the wide range of application, which have a certain flexibility are called the key ones. The same core competencies provide the productivity of different activities. Competence cannot be isolated from the specific conditions of its implementation. The Council of Europe has identified five groups of key competencies, the formation of which is emphasized in the training of young specialists:

- political and social competence - the ability to take responsibility, to jointly work out a solution and participate in its realization, tolerance to different ethnic cultures and religions, the manifestation of contingency of personal interests with the needs of the enterprise and society, to participate in the functioning of civil society institutions;
- intercultural competence, promoting a positive relationship between people of different nationalities, cultures and religions, understanding and respect for each other;
- communicative competence, determining mastering the technologies of oral and written communication in different languages, including computer programming and communication via the Internet;

- social-informational competence, characterizing the mastery of information technologies and the critical attitude to social media information;
- personal competence - is commitment to continuous improvement of the educational level, the need for updating and implementing their personal potential, the ability to independently acquire new knowledge and skills, the ability to self-development.

According to V.G. Gaifullin, the implementation of competence-based approach is associated with the satisfaction of human needs in vocational education, enriching the possibility of its implementation; the formation of strategies for personal and professional development [3]. This approach allows to provide competitive professionals. The effect is achieved by the following tasks:

- motivation of personal and professional development;
- formation of professional competence;
- development of social-communicative, general and specific professional competences;
- development of metaprofessional qualities;
- the formation of individual style of professional activity;
- designing alternative scenarios of the professional future;
- development of pedagogical abilities.

Qualification requirements of the future professional teacher concretize the necessary knowledge and skills in the blocks of subjects and individual academic disciplines [1, 2, 6]. The main characteristic of professional-pedagogical high school should be scientifically understood professional orientation of the entire educational process, successfully solving the problem of the immediate preparation for the professional activity and the formation of a teacher's competitiveness.

Thus, the teaching abilities of the students of professional-pedagogical educational institution - is the aggregate of individual psychological characteristics of the teacher's personality, that meet the requirements of universal functional professional-pedagogical activity and determine the success in mastering this activity.

Thus, we conclude that the role of pedagogical skills in professional formation of the student of professional-pedagogical university is great.

The development of pedagogical abilities was considered by such contemporary scientists as V.V. Voronov, B.A. Vyatkin, K.V. Gavrilovets, M.R. Ginsburg, E.V. Esipova, R.S. Nemov, Y.S. Tyunnikov, A.A. Faizullaev et al. [6, 9, 11]. In general, scientists are developing teaching abilities by solving various pedagogical situations.

Based on the our conclusions, we propose to develop the teaching abilities through the problem modeling. For example, American scholar W. Littelvud (Littlewood. W) defines the following basic rules of the problem modeling [12]:

- the students are invited to put themselves in a situation that may arise outside of the classroom, in real life;
- there is a need to adapt to a particular role in this situation. In some cases, he can play himself, in the others he would have to take on the imaginary role;
- the students must behave as if everything were happening in real life.

Consequently, on the base of use of the problem modeling the development of students' pedagogical abilities in pedagogical educational institution happens due to [12, 13]:

- developing the ability to express ideas and suggestions;
- improving the skills of interaction with different people;
- developing the skills to spontaneously answer questions and deal with extraordinary situations;
- the visualization of the collected ideas;
- the development of pedagogical tact;
- opportunities to develop their mind, because it is necessary to build suspense and implement it;
- the development of psychological plasticity;
- developing the ability to navigate in real-life situations by playing them repeatedly, as if in his dream world;
- the development of active attitude to life and dedication in fulfilling the stated objective.

REFERENCES

1. Aismontas, B.B. Pedagogical psychology [Text]: Schemes and tests / B.B. Aismontas. - Moscow.: Vldos press, 2002. - 208 p.
2. Aminov, N.A. Psychodiagnosis of pedagogical abilities: Pretests [Text] / N.A. Aminov, N.A. Morozova, A.L. Smjatskikh. - M.: Moscow psychological - sociological University, 1994. - 221 p.
3. Gaifullin, V.G. The building of professional-pedagogical qualities of future teacher on the base of using of the qualitative characteristic. [Text] / V.G. Gaifullin // Professional-pedagogical directivity while teaching future teachers: Collected science articles. Rostov-on-Don, 1986, pp. 78-99.
4. Zeer E.F. Foundations of personality-oriented education [Text]: Ekaterinburg: Ural state professional and pedagogic. University press, 2001. 51 S.
5. Zeer E.F. the Psychology of occupations] [Text]: textbook for University students. 2-e Izd., Rev., additional M.: Academic Project; Ekaterinburg: Business book, 2003. 336.
6. Zimnaja, I.A. Pedagogical psychology [Text]: textbook for university students / I.A. Zimnaja. - Moscow: Logos, 2003. - 384 p.
7. Kuzmina, N.V. Professional occupation abilities in teacher and training officer personality [Text] / N.V. Kuzmina. - Moscow, 1989. - 233 c.
8. Litvinenco, M.V. The planning of the results of training for specialists in the module system condition [Text]: Methodic book. - Moscow.: University press, 2006. - 60 p.
9. Markova, A.K. Psychology of teachers work [Text]: the book for teacher / A.K. Markova. - Moscow: Prosveshenie, 1993. - 192 p.
10. Nemov, R.S. The Psychology. Volume 1,2,3 [Text] / R.S. Nemov /«Vldos», Moscow, 2001. pp. 54-67; pp. 267-298; pp. 445-452.
11. Novikov A.M. Introduction to the methodology of a game activity [Text] / A.M. Novikov. - M.: Egves, 2006. - 48 s.
12. Fominykh M.V. Fundamentals of the problem-model approach in modern educational practice [Text]: Acmeology of professional education: the materials of the 13th Russian scientific-practical conference, Ekaterinburg, 17 - 18 March 2016 Ekaterinburg: RSVPU, 2016. P. 323 - 327.
13. Chapaev N.To. The stages of implementation of innovative educational process [Text]: Materials of 20th Russian scientific-practical conference "Innovations in professional and vocational teacher education". 2015. P. 185-188.

УДК 37.048.3

Фоминых Мария Вячеславовна

ФГАОУ ВО «Российский государственный профессионально-педагогический университет», Россия, Екатеринбург¹
Доцент кафедры «Германской филологии»
Кандидат педагогических наук
E-mail: Fominykh.maria12@yandex.ru
ORCID: <http://orcid.org/0000-0002-9700-4483>
РИНЦ: http://elibrary.ru/author_profile.asp?id=589063
Researcher ID: <http://www.researcherid.com/rid/L-9332-2016>

Роль проблемного моделирования в профессиональном становлении студента

Аннотация. В данной статье рассмотрены основные содержательные характеристики отдельных функций в общей структуре деятельности учителя. Актуальность статьи определяется тем, что особенность обучения в современной школе во многом определяется нарастающим объемом информации, постоянной модернизацией и усложнением учебных программ. В связи с этим серьезно переосмыслению подвергается традиционно сложившийся процесс обучения в вузе в целом и учебная деятельность студентов, что определяет необходимость поиска методов обучения, способствующих развитию педагогических способностей, а также активной позиции студента в данном процессе. Среди средств, развивающих педагогические способности студентов в процессе их обучения, выделяется проблемное моделирование. Автором определяется роль проблемного моделирования в профессиональном становлении студента профессионально-педагогического вуза. Автором раскрывается понятие и сущность педагогических способностей студентов профессионально-педагогического учебного заведения через квалификационные характеристики будущего педагога-профессионала и основные компетенции как обобщенные способы учебных действий, обеспечивающих продуктивное выполнение профессиональной деятельности. В статье рассмотрены основные характеристики профессионально-педагогического вуза: научно понимаемая профессиональная направленность всего учебно-воспитательного процесса, успешно решающая задачи подготовки к непосредственной профессиональной деятельности и формирования конкурентоспособности педагога.

Ключевые слова: проблемное моделирование; профессиональное становление; профессиональная деятельность; профессионально-педагогическая деятельность; педагогические способности; проблемно-модельный подход; компетентностный подход

¹ 620018, Екатеринбург, Машиностроителей, 11