

**The system of professional  
training of future teachers:  
functional approach**

## THE SYSTEM OF PROFESSIONAL TRAINING OF FUTURE TEACHERS: FUNCTIONAL APPROACH

## EL SISTEMA DE FORMACIÓN PROFESIONAL DE FUTUROS DOCENTES: ENFOQUE FUNCIONAL

### ABSTRACT

The training of students and future teachers is important for modern education. A complex social structure, actively formed by information technology, requires that the modern teacher must be fully prepared for diverse manifestations of sociability and a broad perspective. A modern pedagogical university should form these specialist characteristics. For this purpose, an important objective is to study the importance of multifaceted functional approach in education. The functional analysis of the professional training system of future teachers is an important preparatory stage in the implementation of the program for the integral development of student-teachers. Among the many functions of the educational system, we can distinguish the following: translational, axiological, activity, educational, educational and development functions. The most important of these are the axiological, activity and development functions. The axiological function forms the world of values and it is very important that these values are directed towards the solution of humanizing human tasks. The activity function allows the future specialist to perform their tasks, despite the difficulties that arise. The task of educational development will develop the ability to complete the course of work

KEYWORDS: education, professional training, functional analysis, competence.

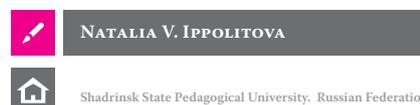
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### RESUMEN

La formación de estudiantes y futuros profesores, es importante para la educación moderna. Una estructura social compleja, formada activamente por la tecnología de la información, requiere que el maestro moderno deba estar completamente preparado para diversas manifestaciones de sociabilidad y una amplia perspectiva. Una universidad pedagógica moderna debería formar estas características de especialista. Para este propósito, un objetivo importante es estudiar la importancia del enfoque funcional multifacético en la educación. El análisis funcional del sistema de formación profesional de futuros docentes es una etapa preparatoria importante en la implementación del programa para el desarrollo integral de estudiantes-docentes. Entre las muchas funciones del sistema educativo, podemos distinguir las siguientes: funciones traslacionales, axiológicas, de actividad, educativas, educativas y de desarrollo. El más importante de ellos son las funciones axiológicas, de actividad y de desarrollo. La función axiológica forma el mundo de los valores y es muy importante que estos valores se dirijan a la solución de las tareas humanas humanizadoras. La función de actividad permite al futuro especialista realizar sus tareas, a pesar de las dificultades que surgen. La tarea de desarrollo de la educación permitirá desarrollar la capacidad de completar el curso del trabajo

PALABRAS CLAVE: educación, entrenamiento profesional, análisis funcional, competencia.

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## INTRODUCTION

Progressive reform and modernization of the system of professional education in Russia and all over the world, the results of numerous studies in the field of new educational and pedagogical technologies related to the problem of forming the foundations for the professionalism of the future mathematics teacher of a new generation, require all modern demands in the process of his professional training.

The civilizational challenges also have a significant impact, namely: the humanization and democratization of modern society, the growth of the social role of the individual, the development of her intellectual and creative potential, deep changes in the system and structure of education, the positioning of education as the driving force for the development of civil society, the dynamics of scientific and technical modernization, the need for rapid adaptation in an information technology society (Michailovich et al, 2017 and (Yessembayeva, 2018) This actualizes the objective need for the creation of such a system of professional training for the future teacher of mathematics, which would ensure the advanced training of teachers which are able to carry out professional activities, guided by new conceptual principles, development of personality, to satisfy educational and spiritual - cultural needs and needs of the individual and provide an opportunity to be competitive in the labor market on the basis of comprehension of the existing historical and pedagogical experience and modern didactic achievements in the development of the teacher's professionalism.

The goal of this process is the formation of students' readiness for effective professional pedagogical activity. This goal is realized in the overall educational process of the university, aimed at solving the problems of professional development of future specialists and

reflecting various aspects of their professional development.

## 2.METHODS

Analysis of the concept of "readiness for pedagogical activity", cited above, allows us to identify the structural components of professional training for students of a pedagogical university: cognitive, praxicological, personal. The cognitive component is aimed at forming the theoretical readiness of future teachers for professional work, praxicological contributes to the formation of practical readiness, and the personal component ensures the formation of moral and psychological readiness of students for pedagogical activity (Igorovna et al, 2017).

Such methods as testing in pedagogy, psychology, sociology, a set of professionally oriented tasks for testing the formation of the cognitive component in all competencies. They were used to determine the level of theoretical knowledge about the professionalism of the mathematics teacher and knowledge of multimedia technologies; a written description of the basic concepts (Salavati-Niasari et al., 2015)

The use of this diagnostic material made it possible to determine the level of knowledge about the content of the foundations of the professionalism of future mathematics teachers, the innovative and multimedia technologies for their formation.

### COMPETENCES:

1. profession-subject - the student determines a certain amount of professional knowledge in teaching technologies;
2. profession- technological - the student has knowledge of the essence of innovative and multimedia technologies, the possibility of their use in the process of teaching students in the general education school, the difficulty of working with them;
3. profession-personal - the student demonstrates the basic pedagogical, socio-psychological knowledge as the basis for the professionalism of the modern teacher.

### 3. RESULTS AND DISCUSSION

Imperfection of theoretical knowledge in the development of teacher's professionalism leads to the fact that the students' notes and teachers-practitioners

are illogical; a significant part of the respondents are not able to express their thoughts with the help of special terminology. Despite the fact that the problem considered quite widely covered in the pedagogical and psychological literature and the need to use modern innovative and multimedia technologies in teaching pupils to mathematics is universally recognized, future mathematics teachers were very reluctant to spend their efforts on mastering the basics of professionalism and the ability to use innovative and multimedia technology in professional activities.

For them, it was a surprise that practitioners stated that after graduating from high schools and starting work in the school, they would have to conduct lessons and extra-curricular activities alone with students of the senior and basic schools, without the support of a tutor teacher, using computer and network resources (not always familiar), to introduce innovative methods, not having enough time for their assimilation, otherwise they will not be in demand in the professional pedagogical community. "Undoubtedly, the education system can not be absolutely a conservative, it is necessary to follow the transformation of the development of the social system, changes in the structure of social production and social structure.

However, they must be implemented in accordance with programs developed by competent people, analyzed by independent experts, discussed in public organizations, among educational specialists and all interested persons. New models of educational institutions with a description of all the socio-economic consequences of the reorganization should be developed. In practice, everything happens differently: universities are first unified, and the model is developed later, no one does calculations of social and economic consequences at all (Chernetsova et al, 2016).

The essence of the basis for the professionalism of the future teacher must be regarded as an integrative characteristic of the personality, which is a system of profession-subject, professional, technological and profes-

sion-personal competencies that reflect the high level of professional competence, teacher pedagogical skills, teacher-oriented qualities, creative approach to organization pedagogical activity, ability to reflect, readiness for constant self-development and self-improvement. Mastering of this phenomenon as a value, a reference point of pedagogical work provides high-performance pedagogical activity, a manifestation of the individuality of a professional teacher.

The importance of the pedagogical technology of forming the foundations of the future teachers' professionalism, which is presented as the implementation of the target setting for the professional self-development of the future teacher by integrating the subject-subject interaction of the student, teacher and various multimedia learning tools in the form of a single software product combining different types of information (text, graphic images, slides, audio and video information, animation), the implementation of which provides the basis for the professionalism of future teachers.

The allocation of functional components of the system of professional training (Mafi et al. 2012) for future teachers is associated with the disclosure of the procedural aspect of the preparation and the structure and specificity of pedagogical activity, its multidimensionality, which provides a basis for distinguishing functions that ensure the integration of the elements of the system into a single whole and its successful functioning. "The functions of the teacher's professional activities are transformed in the process of learning activities into specific activities, which in their community form a system of professional training for future specialists" (Kazandayev, 2015). There are: translational, axiological, activity, educational, educational and developing functions.

These functions reflect the capabilities of the training system for future teachers, the relationship and interdependence of its individual components.

The translational function assumes the preservation of historical memory, a critical rethinking of the experience of previous generations, and the development of the right criteria and social reference points for the

interrelations of subjects of pedagogical activity.

The allocation of the axiological function of the professional training of future teachers is conditioned by the change in the paradigm of modern education, which considers the educational process as a means of involving learners in the spiritual values accumulated by society in the development process. In modern studies (Slavtchenko et al, 2003), the axiological function of education is understood as such values of education, which are of great importance for the educational system itself, society, state, individual person at the present time and remain especially relevant in future. These properties are considered as value due to the fact that their characteristics reflect a further strategy for the development of education and have a significant impact on the deepening and improvement of social processes (Gapsalamov, 2017).

The activity function of the professional and pedagogical preparation of future teachers is conditioned by the purpose of the preparation, which is the formation of readiness for pedagogical activity among students. This assumes the formation of an active professional position of future teachers in the implementation of pedagogical activity, which becomes possible on the basis of students' inclusion in a variety of activities, having a pedagogical orientation, in a variety of forms, forms and content.

The educational function expresses the orientation of preparing future teachers to provide students with a fundamental knowledge of the fundamentals of pedagogical theory and school practice, and the formation of a system of general and especially pedagogical knowledge and skills necessary for successful pedagogical activity.

Educational function is the continuation of those value-normative guidelines that form the basis for the development of any education. Speech, of course, is about the need to take into account the whole complex of trends that characterizes the moral life. She does not tolerate attempts to present everything in one perspective, as well as the desire to share the existing picture of the world on the principle of bipolarity.

The developing function of training reflects its influence on the development of the professionally-oriented thinking of future teachers, their pedagogical abilities. The development of attention, perception, memory, imagination of students, their speech in the process of this preparation is of particular importance. The development of all aspects of their personality is carried out in the process of professional training, which is a necessary condition for the success of future professional pedagogical activity.

According to the interdisciplinary nature of the teacher's professionalism there is a need for an integrated approach to the definition of methodological strategies for its training. Systematics points to the structured and multicomponent foundations of the teacher's professionalism as a systemic integrity and systemic process of forming the foundations of the professionalism of future mathematics teachers as a unity of interrelated components. The synergetic approach allows you to focus on the openness, spontaneity, self-development of the fundamentals of the mathematics teacher's professionalism, the need to take into account the random factor that affects the effectiveness of forming the foundations of professionalism and requires analysis (self-analysis), updating the student's views on the future of professional activity.

The use of the competence approach is important for the formation of students in the profession-subject, professional and technological, professional-personal competence, the ability to self-development and self-improvement. The acmeological approach to the formation of the basis of professionalism of the individual is considered in connection with the ability to self-development, self-realization, the formation of a student as a subject of professional activity, strives to achieve creative results and mastery in it.

The culturological approach points to the culture-like type of professionalism of the teacher, it guides the organization of the educational process to humanistic, personally significant values. The use of the technological approach implies a guaranteed educational result, mastering students with innovative and multimedia teaching technologies.

#### 4. CONCLUSION

Realization in interrelation and unity of the allocated functions of the personal aspect of the system of professional training of future teachers ensures its stability and successful development. The concept of personal growth, actively used at present, does not reflect the moral and spiritual values of education. In the concept of personal growth, the leader is an individual who can suppress the opinion of others, change their minds, transcend them. This is good in terms of superiority of purpose over means of achievement. But not all people can and consider it necessary to move exactly in the direction in which they are called by the leader. Functional analysis allows you to split the functions of the modern leader into several components; the emphasis will be placed on the integrity of the humanistic worldview of the future teacher.

Moral psychological preparation as an integral component of the system of professional training for future teachers is associated with the formation of a moral and psychological aspect of students' readiness for pedagogical activity. This includes the development of value orientations for future teachers, an interest in the pedagogical profession, professional and personally significant qualities and competencies, i.e. involves the formation of a professional-pedagogical orientation of the personality of the future teacher. Personal qualities of the future teacher are no less important, and in some cases, more important than professional knowledge in a particular field.

#### 5. SUMMARY

So, summarizing, we note the following. The use of the systemic, professional-personal and integrative-activity approach as a methodological basis for research makes it possible to consider the professional preparation of students of a pedagogical university for pedagogical activity as a complex, systemic phenomenon.

The general provisions of this article are reduced to the role of the moral and spiritual-value component in the worldview of the teacher's personality. The role of the university is high in the formation and development, because there the students compare their personal inclinations and professional qualities. The student determines his willingness

to perform one or another professional duty - to be a teacher of history or literature, physics or chemistry. The common thing in all cases is to be human! 

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