

## THE ESSENCE OF THE CONCEPT OF "PROFESSIONAL ACTIVITY OF A MATHEMATICS TEACHER"

A. A. Ergashev  
Kokand State Pedagogical Institute  
Senior Lecturer of KSPI

F. F. Vakhobov  
Kokand State Pedagogical Institute

### ANNOTATION

This article presents scientific research on the essence of the concept of "professional activity of a mathematics teacher", as well as on its role and significance in the modern educational process.

**Keywords ;** pedagogical abilities, pedagogical professionalism, professional competence, pedagogical creativity, pedagogical culture.

Determination of the content of the concept of professional pedagogical activity and related concepts - "the structure of pedagogical activity ", "pedagogical abilities", "pedagogical professionalism", "professional competence", "pedagogical creativity", "pedagogical culture" - has always been one of the most relevant problems of pedagogical science and practice.

*Professional pedagogical activity.* Profession (lat. professio - officially specified occupation, from profiteor - I declare my business) - a type of labor activity of a person who owns a complex of special theoretical knowledge and practical skills that are acquired as a result of targeted training and work experience. The meaning of the pedagogical profession is revealed in the activities carried out by its representatives and which is called pedagogical activity. According to V.A. Slastenin's definition, pedagogical activity is a special type of professional activity aimed at transferring the culture and experience accumulated by mankind from older generations to younger generations, creating conditions for their personal development and preparing them to fulfill certain social roles in society. The pedagogical process is a specially organized, purposeful interaction of teachers and pupils, aimed at solving developing , educational and educational tasks [133]. A person who organizes and implements the pedagogical process at school is a teacher - a person who has special training and is professionally engaged in pedagogical activities. Pedagogical activity as a professional activity takes place in educational institutions specially organized by society : preschool institutions, schools, lyceums, colleges, higher educational institutions, etc.

The essence and structure of pedagogical activity, as well as its productivity associated with them, is one of the most pressing problems of pedagogical science and practice. A general scientific method for solving theoretical and practical problems of pedagogical activity is a systematic approach (P.K. Anokhin, M.A. Danilov, F.F. Korolev, V.M. Malinin, etc.); In pedagogy, there are various options for applying general systems theory to the analysis of pedagogical activity. Pedagogical activity as a complex dynamic system has its own specific structure, which includes numerous elements.

This paragraph provides a review and analysis of the content of the concepts "professional - pedagogical activity" (PD), "structure of pedagogical activity" and related concepts "pedagogical abilities", "pedagogical professionalism", "professional competence", "pedagogical creativity", "

pedagogical culture” because professional (methodological) training of a teacher in modern conditions is built on their basis (Table 1.1.).

Table 1.1. Professional pedagogical activity

No.	Concept, author, year	Content of the concept
1	Pedagogical activity N.V. Kuzmina 1967	PD components: gnostic (cognitive), design, constructive, organizational , communicative.
2.	Pedagogical activity A.I. Shcherbakov 1968	PD components: gnostic (cognitive), design, constructive, organizational , communicative.
3.	Pedagogical activity V.A. Slastenin 1976	The activity of the teacher in solving pedagogical problems: 1) analysis of the pedagogical situation (diagnosis ), designing the result (forecasting ) and planning pedagogical influences; 2) design and implementation of the educational process; 3) regulation and correction of the pedagogical process; 4) final accounting, evaluation of the results obtained and the definition of new pedagogical tasks.
4	Pedagogical activity E.I. Lyashchenko 1988	The totality of individual activities: the analysis of educational and methodological literature, the selection on this basis of the necessary material, the construction of the subject content of the lesson, planning, organizing various types of students' activities and managing them; assessment of their own activities and the activities of students.
5.	Pedagogical activity A.K. Markova 1993 r.	Professional activity of the teacher; types of PD: teaching, educational, organizational , propaganda, managerial, diagnostic, self-education activities. Components of PD: pedagogical goals and objectives, pedagogical impact on the student, pedagogical introspection.
6.	Pedagogical activities of G.E. Alimukhambetov 1994	Organization by the teacher of the process of education and upbringing, self-development and self-government of the teacher, the student team and the student, as subjects, in their joint activities aimed at achieving the developed goals that are significant for each of them and society as a whole.
7.	Pedagogical activity V.V. Serikov 1999	Person-oriented PD, including reflection, development of abilities to be a person , personal experience, person-oriented situation, professional readiness, managerial activity.
8	Pedagogical activity G.V Khoreva 1999	The activity of the teacher, aimed at the development of individual abilities and positive qualities of the personality of students, at the assimilation by students of ZUN (subject, general educational, etc.). Components of PD: pedagogical task - pedagogical goal in given conditions; pedagogical actions adequate to the pedagogical task; reflective actions.
9.	professional activity V.M. monks 1998	Components of PD: informational, research , intellectual, creative, diagnostic, prognostic, communicative, axiological, managerial, designing, innovative.

10	Pedagogical activity IN AND. Ginetsinsky 1992	Components of PD: presentation (focused on the presentation of educational material), incentive (focused on creating interest in the assimilation of the material, corrective and diagnosing.
11	Professional activity State. Educational standard of higher professional education	

An analysis of various approaches to the content of the concept of "professional pedagogical activity" shows that this concept is integrative, containing various components of activity in various combinations. According to E.I. Rogov, it is quite difficult to draw a real, hard line between professional and non-professional activities. Possessing a complex internal structure, the profession includes many heterogeneous subject-instrumental, ideal and spiritual components.

We divide the selected components of professional pedagogical activity into traditional (suggesting the orientation of the pedagogical process to the activities of the teacher) and innovative (managerial) (suggesting the orientation of the pedagogical process to the activities of the student, the organizer and manager of which is the teacher).

Traditional ingredients include:

- cognitive (gnostic), ensuring the productivity of the intellectual and cognitive activity of students, including knowledge not only of their subject, but also knowledge of the methods of pedagogical communication, psychological characteristics of students (cognitive processes, patterns of personality development), as well as processes of self-knowledge (one's own personality and activities) (N.V. Kuzmina, A.I. Shcherbakov, V.M. Monakhov, V.V. Serikov and others);
- informational, including the collection and selection of information, its systematization, structuring, generalization, etc. (A.I. Shcherbakov, E.I. Lyashchenko, V.M. Monakhov and others);
- organizational, including the main directions of the organization of pedagogical activity, on the implementation of which its effectiveness depends; a system of teacher skills to organize their activities, as well as the activity of students (G.E. Alimukhambetova, N.V. Kuzmina, A.I. Shcherbakov, V.A. Slastenin, E.I. Lyashchenko, V.I. Ginetsinsky (incentive component), V.M. Monakhov (managerial), etc.);
- constructive, including the features of constructing the teacher's own activity and the activity of students, taking into account the goals of teaching and education (lesson, lesson, cycle of classes) (N.V. Kuzmina, A.I. Shcherbakov, V.A. Slastenin, E.I. Lyashchenko, G.V. Khoreva (components - pedagogical task - pedagogical goal in the given conditions "student - educational material - teacher"), V.I. Ginetsinsky (presentative component), etc.);
- communicative, involving the organization and effective manifestation of communication and interaction of objects and subjects in the course of pedagogical activity aimed at achieving didactic (educational and educational) goals (N.V. Kuzmina, A.I. Shcherbakov, V.A. Slastenin, E.I. Lyashchenko, G.V. Khoreva, V.M. Monakhov and others);

Innovative components of professional activity can be conditionally divided into two groups: activity components, formulated in a generalized way, and specific activity components.

1) Components formulated in general terms:

- managerial, including the ability to organize management, motivate, goal-setting, predict, organize

the activities of students, control it, adjust and track the results (V.A. Slastenin, G.V. Khoreva, V.I. Ginetsinsky, V.M. Monakhov and etc.);

-innovative, reflecting the creative potential of the teacher, going beyond the limits of normative activity; including the ability to collect information, analyze pedagogical experience, set goals, predict, plan, model, experiment, transform, rethink, evaluate, modernize, process results, implement (V.M. Monakhov, V.V. Serikov, etc.).

2) Specific management and innovation components:

- design, which involves setting specific goals and objectives for students, as a result of which it is possible to achieve certain results of training, development and education (N.V. Kuzmina, V.A. Slastenin, V.M. Monakhov, etc.);

- research, including the ability to find a problem related to the educational activities of students, its actualization; formulate goals, objectives, subject, object, hypothesis, master and plan methods of pedagogical research, conduct observation and experiment, process results, formulate conclusions (A.I. Shcherbakov, V.M. Monakhov, etc.);

- intellectual, including the skills of systematization, generalization, analysis, synthesis, classification, abstraction, comparison, comprehension, highlighting the general, individual, goal-setting, reflection (V.M. Monakhov, M.M. Potashnik, V.V. Serikov, etc.) ;

- diagnostic, including the ability to carry out procedures for diagnosing the assimilation of knowledge and skills, the development and education of students in educational activities, to process the results (V.A. Slastenin, V.M. Monakhov, E.N. Perevoshchikova, etc.);

- corrective, associated with the comparison and correction of the results of students' activities (V.A. Slastenin, V.M. Monakhov, V.I. Ginetsinsky, E.N. Perevoshchikova, G.V. Khoreva, etc.);

- prognostic, including intuitive prediction of the final result of training (V.A. Slastenin, V.M. Monakhov, etc.);

- creative, including the skills of imagination, schematization, typification, anticipation, reconstruction, modernization of information (V.M. Monakhov and others);

- axiological, including the ability to reflect the history of national school education, focus on national values, etc. (V.M. Monakhov, T.S. Polyakova, Yu.A. Drobyshev and others);

- reflexive, including the ability to analyze the teacher's own actions and states (A.I. Shcherbakov, E.I. Lyashchenko, A.K. Markova, V.M. Monakhov, G.V. Khoreva, etc.).

The results of the analysis carried out are presented by the block diagram constructed by us in Figure 1.1.

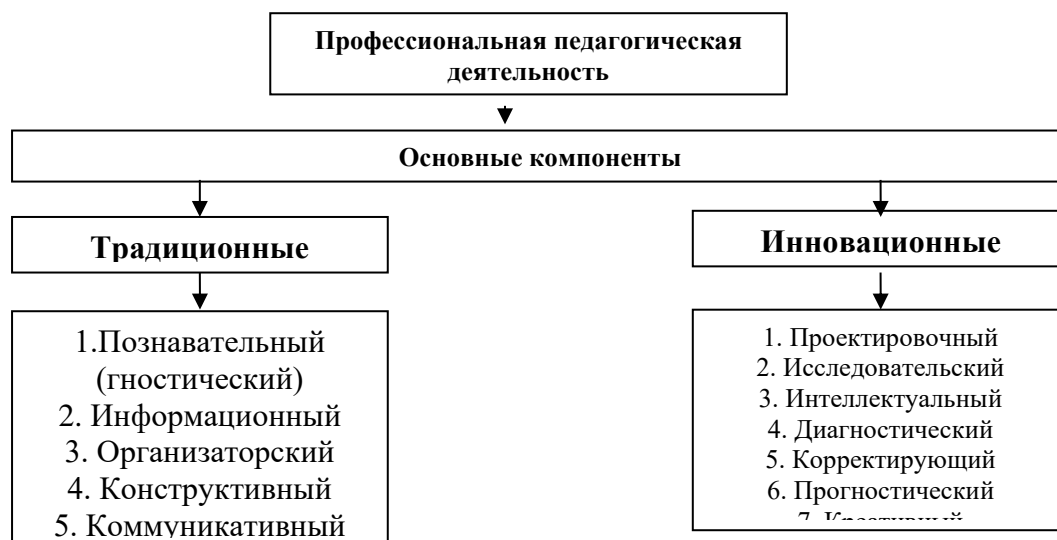


Fig.1.1. Structural diagram of the content of the concept "Professional pedagogical activity"

Table 1.2. different approaches to the content of concepts related to the concept of "professional pedagogical activity" are presented.

Table 1.2. Concepts related to the concept of "professional pedagogical activity"

No.	Concept, author, year	Content of the concept
one.	Pedagogical capabilities V.A. Krutetsky 1976	Didactic, academic, perceptual, speech, organizational, authoritarian, communicative, pedagogical imagination, ability to distribute attention.
2.	Pedagogical capabilities N.V. Kuzmina 1990	Gnostic (research), design , constructive, communicative, organizational abilities.
3.	Pedagogical abilities I.P. sneaky 2001 r.	Organizational, didactic, perceptual (the ability to "penetrate" the psyche of students), communicative, suggestive, research, scientific and educational.
4	Pedagogical professionalism 1997	The ability to calculate the course of pedagogical processes, to foresee their consequences, professional skills, high mobility; the ability to master innovations and quickly adapt to changing conditions, independently choose the field of activity, make responsible decisions and ensure self-regulation of behavior.
5.	Pedagogical professional potential 1997	The system of natural and acquired qualities in the process of vocational training. Components: intellectual, motivational, communicative, operational, creative.
6.	Pedagogical competence MM. Potashnik 1987	Developed intellect, versatility of interests, erudition, social activity, modesty and tact, sense of proportion, ability to communicate, work in a team, goodwill, etc.
7.	Professional competence A.K. Markova 1993	Theoretical activity (analytical, prognostic, projective, reflective); organizational activity; pedagogical communication; the personality of the teacher.
8	Professional competence V.S. Bezrukov 1996	Possession of knowledge and skills that allow expressing professionally competent judgments , assessments, opinions
9.	Professional competence V.M Monakhov 1998 r.	The totality of three aspects: a) semantic (including the adequacy of comprehension of situations , understanding of relationships, evaluation); b) problematic - practical (providing the adequacy of recognition of the situation from the standpoint of the goals of tasks, norms); c) communicative.
10	Professional competence HE. Shakhmatova, E.F. Zeer1999	The totality of professional knowledge and skills , as well as ways of performing professional activities.
11	Professional Competence 2000 r.	The unity of the theoretical and practical readiness of the teacher to implement PD, characterizing his professionalism
12.	Competence of V.A. Demin	The level of individual skills , reflecting the degree of compliance

	2000 r.	with a certain competence and allowing to act constructively in changing social conditions. Skills are a key component of competence.
13.	Competence Strategy modernization education 2001 r.	1) Combines the intellectual and skill components of education; 2) it contains the ideology of interpreting the content of education, formed "from the result" ("output standard"); 3) has an integrative nature (takes in a number of skills and knowledge related to the spheres of culture and activity».
14	Technological Competence teacher N.N. Manko 2002 r.	The system of creative and technological knowledge, abilities and stereotypes of instrumentalized activity to transform the objects of pedagogical reality. Components: content, activity, personality-oriented.
15	Pedagogical creativity 2000 r.	The process of solving pedagogical problems in changing circumstances.
16.	Pedagogical creativity 2001 r.	Pedagogical activity, characterized by novelty and originality: the development of new content, methods, principles, forms, pedagogical systems, etc. Conditionally divided into discoveries, inventions and improvements
17.	Professional culture T.S. Polyakova, 1994	A multi-level, complexly structured and at the same time integral space, including mathematical, pedagogical, methodological and national Russian culture.

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