



## TECHNOLOGY OF STEP-BY-STEP FORMATION OF THE METHODOLOGICAL COMPETENCE OF THE FUTURE MATHEMATICS TEACHER

O'rinov Xalimjon Xamdamijonovich

PhD student of FarDU

E-mail: [urinovxalimjon@gmail.com](mailto:urinovxalimjon@gmail.com)

Tel.: (+998-97) 555-54-27

<https://doi.org/10.5281/zenodo.7990135>

**Abstract:** This article is dedicated to the step-by-step training of modern mathematics teachers, the role of professional competencies in solving this problem, the possibilities of their formation, and the role of competent issues in this is sufficiently revealed.

**Keywords:** Competence, static, dynamic, functional, professional competence, formation of professional competence, methodological competence.

Today, by constantly developing the methodological potential of the future teacher of mathematics, we understand the effect of maintaining his quality characteristics. It can be said that management is not limited to only one stage. This stage is constantly repeated, gradually leading to the achievement of the goal. From this, it is clear that the goal is to develop a complex of activities.

One of the promising directions for improving management in the field of education is the technologicalization of education, which is understood as "operational division of the management process and technological support of each process". The main element of technologization of management activities is management action. It has three structures: static, dynamic and functional. Consideration of these structures is important in the development and implementation of management action. If the structural analysis of management behavior is to determine its static and dynamic structures, the functional analysis includes the description of its functional structure.

In this process, in the static structure of management activity, the student acts as a subject of action, the object of management influence is the educational process (future mathematics as a result of the teacher's methodical competence formation and a targeted process), and science is the student's methodical competence. We have indirect control over the nature of influence and its direction, which is determined by its content, means, methods, and organizational forms. Properly organized indirect management helps to create an effective environment for the integrated activity of the student's psyche, its products allow to perform its main function, that is, the function of direct management of the processes of formation of professional competence. Taking into account that the student's psychology is a mechanism for controlling his actions, we conclude that the structure of the educational process should affect the structure of the corresponding mechanisms of the student's psychology. Therefore, in the future, we consider student psychology as a subsystem of management and, in accordance with its main tasks, define the functional structure of management action in the form of six main stages: motivational, cognitive, value-semantic, activity, energy and evaluative. Each stage performs its own functions: motivational, informational, intellectual, regulatory, communicative and self-improvement. All of them are

interrelated and form a single whole, they are necessary to have a purposeful and effective influence on the formation of the methodological potential of the future teacher of mathematics.

It is important to distinguish the activity structure and competence structure of the educational process, for this purpose, the goals of influence at each stage, the form of direct influence on this process, its direction and the expected result of influence on the subject of this process.

The functional characteristic of the management action determines the mechanisms of direct control of the formation of the student's methodical competence: self-awareness is the initial beginning of motivation, which increases with the development of needs, and first of all, after a deep understanding of education, the following processes begin to develop: self-awareness; self-determination; self-expression; self-affirmation; self-regulation.

No	General levels	Steps	The goal	Result
1	Cognitive (knowledge acquisition process-perception)	Diagnostics	Self-determination of the level of high readiness to solve the problem (identification of the initial state)	The need for student self-awareness and self-transformation and self-development
		Motivational	Understanding the importance of the issue and forming the need to solve it	Self-determination and self-organization for the development of innovative activities
		Normative and analytical	Innovative activity objectification of normatively approved activity	Knowing the activities
2	Axiology	Value-semantic	Knowing the basis of value of the activity being mastered	Valuing relationships and believing in their practical value
3	Praxiological (creation)	Constructive	Create a primary project	Projectivity as a characteristic of the future teacher. Raise your standards
		Activity	Building confidence in practical or practical activities	Active knowledge. Criteria of own activity



	Reflexive-evaluator	Assessing and assessing high-level preparation for teaching mathematics	High level of preparation for professional activity. Creative work experience
--	---------------------	---	---

Figure 1. The dynamic structure of management action for the formation of methodological competence of the future mathematics teacher.

From these processes, the student forms a reflexive feature of self-development and emphasizes that the activity of forming methodical competence acts as a self-regulating system.

The dynamic structure of management action represents its change over time and corresponds to the stages of formation of methodological competence of the future mathematics teacher.

For example: Problem 1. Normative and analytical.

Shipping to the city of Guluston, which is 100 km from Tashkent, costs 2,000,000 soums, and to the city of Samarkand, which is 400 km away, costs 3,500,000 soums. If cost is a linear function of distance (disregarding the quality of roads), determine how the cost of transportation  $y$  depends on distance  $x$ . Answer:  $y = 0.5x + 150$ .

Issue 2.

To cover the upper part of the greenhouse, it is necessary to buy the material "salafan" with an additional 2 percent. If the width of the salafan is 1.5 m, how much salafan is needed to cover the greenhouse with a surface area of 1200 m<sup>2</sup>? Answer: 816 m.

Issue 3. **Value-semantic.**

The container contained 12 liters of lime solution for whitewashing trees. A portion of lime was taken and as much water was poured into the vessel. Then the same amount was taken and water was poured again. If there is 25% lime solution left in the container, how much liquid was removed each time? Answer: 6 l.

Issue 4. **Constructive.**

The liquid level in a cylindrical container is 25 cm. If the main diameter of the second cylindrical container is 2 times larger than the main diameter of the first, what is the height of the liquid level? Answer: 5 cm.

In conclusion, the theoretical aspects of the implementation of the technology of step-by-step formation of the methodological potential of BMOs are as follows:

Actively planning the process of preparing BMO for professional activity in advance, effectively implementing it in the educational process, fair and transparent evaluation and control of the activity in this process, and involving the student himself in correcting the errors that occur in it. It is necessary to ensure the active participation of the professor-teacher.

It is necessary to effectively establish the activity of cooperation with the professor-teacher on the development of educational projects and to determine the educational trajectory of each BMO aimed at the formation of professional competences.

To create sufficient conditions for BMO to participate in pedagogical activities as a teacher during pedagogical practice;

Constantly acquiring independent knowledge, developing a responsible attitude to one's professional activity with a creative approach;



Every pedagogical higher education institution that organizes the educational process based on KYo should change the role of this educational institution in training future teachers, including mathematics teachers, that is, the general secondary schools should be formed not only as a place of education for schoolchildren, but also as a practical basis for training future teachers;

In modern conditions, it is necessary to adequately study the requirements and needs of the employer when training future BMOs and approach the training of specialists from this point of view;

Based on the possibilities, it is necessary to organize the pedagogical practice of the graduates of the higher educational institution of pedagogy in educational institutions or schools where they go to work, and for this purpose, the content, forms and methods of pedagogical practice should be improved based on the goals and tasks of a particular educational institution.

### References:

1. Жук, О.Л. Педагогика. Практикум на основе компетентностного подхода: учеб. пособие / О.Л. Жук, С.Н. Сиренко; под общ. ред. О.Л. Жук. – Минск, 2007. –192 с.
2. M.Barakayev, X.O'rinov. Amaliy mazmundagi masalalar yordamida bo'lg'usi matematika o'qituvchilarida kasbiy kompetentsiyalarni shakllantirish metodikasi. FIZIKA, MATEMATIKA va INFORMATIKA ilmiy-uslubiy jurnal. Toshkent, 2022. -№ 11. -B. 24-32.
3. Каган, М.С. Человеческая деятельность (опыт системного анализа) / М.С. Каган. – М.: Политиздат, 1974. – 328 с.
4. Х.Ўринов. Компетент масалалар - замонавий математика ўқитувчисининг касбий тайёргарлигини такомиллаштириш омили сифатида. НамДУ илмий хабарномаси. Наманган, 2021. -№ 11. -Б. 677-681.

