



## WAYS TO FORM INDEPENDENT THINKING OF STUDENTS IN THE PROCESS OF TEACHING MATHEMATICS

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**Annotation:** the article discusses the concepts of Developmental Education used in pedagogical practice and its significance in the formation of methods of educational and cognitive activity in students.

**Keywords:** developmental education, educational activity, educational and cognitive activity, meaningful training, problem education, mental activity.

It is known that the only and effective way to master the subject of mathematics was to pay special attention to the solution of problems and examples for students. In practical classes, along with the implementation of educational goals of teaching mathematics by solving issues and examples, its independent thinking, developing and educational goals are also realized. Accordingly, the issues of mathematics are used as the main tool in teaching in order to form the knowledge, skills and abilities of students.

The introduction of the national program of training into social life, which determined the stages of radical reform of the educational and educational sphere, entered a decisive stage. The new model of Education, which we are introducing, plays a huge role in the realization of potential forces in our society, the existing intellectual potential in our people. The gaussian format of teaching in the lesson takes place the process of formation of the individual. Increasing the effectiveness of this process using modern pedagogical Technologies is an urgent issue of State importance, which is reflected in the decree on the development of modern pedagogical technologies in the higher education system in directive documents on education. Below we will give some reflections on the ways of independent thinking of students in teaching mathematics.

The process of teaching examples and Malas to be solved as an educational tool can be directly focused on the formation and independent thinking of students ' knowledge, skills and abilities, or the level of formation of knowledge, skills and abilities can also be directed to the implementation of control by the teacher and the student. The first of these tasks belongs to the category of instructive and independent-minded issues, while the second belongs to the category of controlling issues.

Instructive and independent-minded issues began mainly with the formation of elements of theoretical knowledge and related skills, and by control knowledge, we can highlight the concepts and their definitions, theorems and their proofs, rules and algorithms that are formed in the process of reading mathematics. Controlling issues are mainly recommended in independent and control work, and this implies the implementation of theoretical knowledge, which is mastered according to the content of the issues. The issues



proposed in independent and control work are usually intended to apply the knowledge of students in situations familiar to them, which mainly cover a not very large part of educational topics.

It should be noted separately that the examples intended for the formation of rules and algorithms in students play an important role in the formation of skills, skills and independent thinking of Applied Mathematics. In the process of solving such examples, students form computational skills and skills. It is known that in order to form skills and abilities, as well as independent thinking, it is necessary to perform many times exactly those exercises that repeat the rule or algorithm being studied. This creates the need for a system of issues that provide a comprehensive typical assimilation of the subject under study. So, creating a system of examples and issues for mastering this or that rule or algorithm, we believe that teaching on this basis is the main tool for the formation of skills, skills and independent thinking in students.

### **References:**

1. Raximovich, K. K., & Solijonovich, N. A. (2022). Methods of Formation of Thinking Activities of High School Students. Central asian journal of mathematical theory and computer sciences, 3(6), 22-24.
2. Kodirov, K., Nishonboyev, A., Ruzikov, M., & Tuxtasinov, T. (2022). SUBADDITIVE MEASURE ON VON NEUMANN ALGEBRAS. International scientific journal of Biruni, 1(2), 134-139.
3. Kodirov, K. R., & Nishonbaev, A. S. (2021). On the scientific basis of forming students' logical competence. ACADEMICIA: An International Multidisciplinary Research Journal, 11(3), 123-128.
4. Komiljon, K., & Azizbek, N. (2022). Professional approach in the formation of knowledge and skills of high school students.
5. Kodirov, K., Nishonboyev, A., Ruzikov, M., & Alimov, Z. (2022). Formation of students'knowledge and skills in the educational process based on the active approach. International scientific journal of Biruni, 1(2), 339-344.
6. Kodirov, K. R., & Nishonboyev, A. S. (2020). Competence-based approach in teaching some elements of mathematics lesson design methodology. Scientific Bulletin of Namangan State University, 2(9), 390-394.
7. Solizhonovich, N. A. (2014). Certain properties of fractional integro-differentiation operator of functions in other features. Bulletin of the Kamchatka Regional Association «Educational-Scientific Center». Physical & Mathematical Sciences, (2), 13-17.
8. Нишонбоев, А. С. (2014). Некоторые свойства оператора дробного интегро-дифференцирования от функции по другой функции. Вестник КРАУНЦ. Физико-математические науки, (2 (9)), 11-16.
9. Нишонбоев, А. (2022). Ривожлантирувчи таълим-ўқувчиларида ўқув-билув фаолият усулларини шакллантиришнинг педагогик асоси. IJTIMOIY FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI, 2(12), 99-105.
10. Kodirov, K., Nishonboyev, A., & Yunusaliyeva, M. (2022). Matematikani o'qitish jarayonida o 'quvchilarni mantiqiy kompetentligini shakllantirish. Oriental renaissance: Innovative, educational, natural and social sciences, 2(11), 276-281.

11. Abdumannopov, M. M., Akhmedov, O. U., & Tokhtasinov, T. (2022). Essential modes for activating mastering subjects at schools. Central Asian journal of mathematical theory and computer sciences, 3(12), 1-4.
12. Рузиков, М. (2022). Уч ўлчовли Лаплас тенгламаси учун ярим чексиз параллелепипедда нолокал чегаравий масала. Yosh Tadqiqotchi Jurnali, 1(5), 128-137.
13. Raximovich, K. K., & Shokirjon o'g'li, T. T. (2022). Oj-algebra of measurable elements with respect to a subadditive Measure on Jordan algebras. European Journal of Interdisciplinary Research and Development, 4, 19-21.
14. Khursanalievich, K. U., Ugli, T. T. S., & Askarali, M. (2022). Drawing and image models tool math learning options. American Journal of Applied Science and Technology, 2(09), 26-34.
15. Gafforov, R. A., & To'xtasinov, T. (2022). Using the taxonomy of Blum in Discrete math and logic math lessons. Texas Journal of Multidisciplinary Studies, 9, 105-107.
16. Kodirov, K., Nishonboyev, A., Ruzikov, M., & Tuxtasinov, T. (2022). Subadditive measure on von Neumann algebras. International scientific journal of Biruni, 1(2), 134-139.
17. Кодиров, К. Р., Тухтасинов, Т. Ш., & Йўлдошали, Й. У. (2021). Связь топологии сходимости по мере на алгебрах Фон Неймана. Вестник магистратуры, 7.