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INTERACTIVE METHODS FOR DEVELOPMENT OF DIVERGENT THINKING IN CHILDREN

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Abstract: This article presents methods and methods for developing divergent thinking, divergent thinking of elementary school students.

Keywords: elementary education, divergent thinking, "What does it look like?", "What to do?" methods, understanding, proof, brainstorming, morphological analysis, modeling, abstraction, segmentation, "Change of image", "New terms", "Day dreams", "White paper" method.

Divergent thinking is a form of creative thinking that uses a non-standard approach to problem solving. Instead of being satisfied with an existing answer or a complete lack of an answer, ask yourself, "What if you tried this?" - is to ask a question and to find the answer to this question is to look for another new type of answer.

Divergent thinking is a thought process used to generate creative ideas by exploring multiple possibilities.

Instead of taking clear steps and moving in a straight line, a person evaluates different aspects of the situation and achieves different results.

Divergent thinking encourages the search and consideration of new and unconventional ways, new and unconventional opportunities, new and unconventional ideas and/or new and unconventional solutions.

It shows that we should effectively use the divergent thinking method of explanation and teaching in the teaching of primary education subjects. Until now, only learned methods were used to find solutions to questions and problems, to complete assignments. Based on the requirements of the present time, we need to teach using non-standard, new methods, from finding various answers to questions and problem situations in subjects, we will consider several directions of completing tasks as examples.

We have grouped the methods used in the development of divergent thinking in elementary school students as follows:

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Group 1. Ways to develop broad perception and sensitivity: "What does it look like?", "What should be done?" methods.
"What does it look like?", "What to do?" methods.

"What does it look like?" game

This game is very convenient to be used during the lesson to connect with the educational material or during the leisure time. In this, the teacher shows pictures of different objects to the students and the students find out what they are similar to. For example, a picture of a bowl is shown and asked to find what else it looks like. To help students, the teacher can provide additional information, change the position of the picture (display it obliquely or upside down), or draw additional lines on the picture.

Pupils who say the most options in the game will be encouraged. During this game, students' divergent thinking develops based on features such as sensitivity, breadth of perception, and richness of imagination.

For example, 3rd graders can be given the following assignment in math class. Suppose a straight line is given. What other tasks can we see in it other than a straight line. What do you know about it, you will be given 5 minutes to find them.

* An incision can be made.

A cross section is a straight line bounded on both sides.

* Vatar can be generated.

Vatar is a cross section connecting any two points taken from the length of a circle

* Radius can be generated.

Radius is the section from the center of a circle to its length.

* Diameter can be generated.

A diameter is a length passing through the center of a circle.

* Triangle sides can be formed.

*Rectangle sides can be formed.

* It is possible to create sides of different shapes.

* Light can be generated.

A ray is a straight line, bounded on one side, and continuing indefinitely.

* Median can be generated.

Median is a cross section of a triangle that bisects the opposite side.

* A bisector can be generated.

A bisector is a line that divides the angle into two equal parts.

* Elevation can be generated.

Altitude is a perpendicular cut from an arbitrary end of a triangle to the opposite side.

* It is possible to create a system of coordinates (ordinates, abscissas).

"What to do?" game

This game is played by dividing students into small groups.

The teacher creates various problem situations and gives the task of finding their solution.

For example, "Imagine that we went on an excursion to the mountainside with our class. We passed through a village to get to the river. The river flows very fast. There is a second village on the other side of the river. The surroundings are very beautiful and beautiful. We want to make a fire for cooking. But we forgot the match. What to do? Who can help us? Or where do we find a match? Is it possible to light a fire in another way?"

Students look for a solution to the problem together with the team, and one of the team members says the answer option. After listening to the answers of all teams, the most convenient answer is selected from among the answer options. Team members who find the most original solution and the most convenient solution will be encouraged. During this game, the richness of imagination, variety, non-standard and original solution finding features are developed.

Group 2. Methods of formation of variable intelligence: methods such as understanding, proof, brainstorming, morphological analysis.

Proof

It is also used in writing essays. It is necessary to prove the truth or falsity of this statement in various ways. However, it should be noted that these methods do not provide reliable evidence of the development of divergent thinking. Also, essay writing serves to develop systematic and holistic divergent thinking along with criticality. They are used to write an essay on a free or fixed topic:

a problem is posed, it is necessary to propose a solution in different ways;

a statement is made - it must be refuted and supported by providing evidence;

a question arises - it must be answered in every way;

a text is offered - you will have to break it down yourself and solve the problem you need and offer several solutions.

"Brainstorming" method They are used to release and activate creative thinking. One type of "brainstorming" is the "6, 3, 5" method, in which 6 people have to propose 3 options for solving a problem in 5 minutes. After 5 minutes, the next 6 people are invited in the same order, and so on.

The method of morphological analysis. This method consists in entering all variables (ideas) into a matrix, i.e. a table, and combining them.

Group 3. Methods of forming a rich and rich imagination: methods such as modeling, abstraction, fragmentation.

The modeling method offers the ability to develop systematic and holistic thinking, as well as the ability to self-determine in the presence of uncertainty.

The construction of the model always takes place systematically and holistically, besides, the modeling process allows to present different options of behavior in an uncertain situation.

"Slicing" method

Applied to tangible things, it involves making a list of key features of an idea or theme and considering what could be suggested to improve each of them.

Group 4. Methods of forming an original and non-standard attitude: methods such as "Change of appearance", "New terms", "Dreams of the day".

"Shape Swap" game

The game "Shape change" is used during leisure time or in accordance with the content of the educational material. The teacher distributes papers with the names of different animals or fairy-tale characters to the students. They are the characters of the fairy tale in turn or h. The students in the audience find the name of this animal or the character of the fairy tale and then list its characteristics.

In addition, the imitative student is given the task of showing this animal in various forms, for example, in the form of a cute, kind, evil, etc.

Pupils who have the most beautiful imitation process and find the most correct answers will be encouraged.

On the basis of this game, students' imaginations are enriched, non-standard thinking features are developed.

"New terms" game

This game is perfect for teaching all subjects, not just mother tongue or reading classes. In this, the teacher explains the meaning of various terms and concepts, and the task is given to find what other words can be used to replace this term or concept. During this game, in addition to the growth of students' vocabulary, their outlook, intellect, and divergent thinking develop.

"Daydreams" game

If intensive work on the problem for a long time does not give an innovative solution, this method is suggested. In such a situation, complete relaxation and imagination can lead to creative inspiration.

The next model of the model of development of divergent thinking in students of primary school age is a meaningful model, and in this model, the conditions, methods and stages of development of divergent thinking of students in the process of primary education are expressed.

Another great method for developing divergent thinking is the "White paper" method. In this, students are divided into 3 groups, each group will have to get one white paper. Assignment: the topic is written on the board, each the members of a group are required to write down what they have learned from the topic on this paper using one or two key words, another main task is that the members of the group must not repeat the written word and the time after the end of time, the results will be reviewed and the winning group will be encouraged.

When is it organized? This method is organized when repeating a previous topic or strengthening a new topic.

What does this method give the child? Basically, children will have to answer the same question in different ways, and the condition that the written word should not be repeated will definitely develop divergent thinking.

The use of interactive methods like the above in daily lessons will not only develop the child's thinking, but will definitely be effective in getting out of problematic situations in the future.

Literature.

1. Abduvaliyeva, N. A. (2020). SOME FORMS OF REFERENCE (ADDRESSING) IN UZBEK DRAMAS. Theoretical & Applied Science, (1), 23-26.
2. Alisherovna, A. N. (2022). LEXICAL-SEMANTIC ANALYSIS OF PERSIAN-TAJIK ACQUISITIONS USED IN GHAZALS. Web of Scientist: International Scientific Research Journal, 3(10), 925-932.
3. Alisherovna, A. N. (2022). LEXICAL-SEMANTIC ANALYSIS OF PERSIAN-TAJIK ACQUISITIONS USED IN GHAZALS.Web of Scientist: International Scientific Research Journal,3(10), 925-932.
4. Alisherovna, A. N. (2023). METHODS OF SPEECH DEVELOPMENT OF STUDENTS IN PRIMARY CLASSES. Open Access Repository, 4(3), 1019-1023.
5. Baydjanov, B. (2021). HIGHER EDUCATION PROSPECTS AND ISSUES OF DEVELOPING INFORMATION SECURITY CULTURE AMONG STUDENTS (ON THE EXAMPLE OF FERGANA REGION): https://doi. org/10.47100/conferences. v1i1. 1284. In RESEARCH SUPPORT CENTER CONFERENCES (No. 18.05).
6. Baydjanov, B. K. (2022). Methodology of Pedagogical Science and its Axiological Possibilities. American Journal of Social and Humanitarian Research, 3(10), 352-363.
7. Jo'rayev Vohid Tojimamatovich, A. M. (2022). Working With Geospatial and Descriptive Data in A Geoinformation System.Periodica Journal of Modern Philosophy, Social Sciences and Humanities,11, 113-116.

8. Kholdorova, I. (2019). SEMANTIC ANALYSES OF GENERATIVE LEXEMES WITH “BIRTH” AND “DEATH” SEMESIN THE UZBEK LANGUAGE. Theoretical & Applied Science, (10), 362-364.
9. Kochkorbaevna, K. B. (2022). FORMATION OF MORPHOLOGICAL COMPETENCE OF JUNIOR SCHOOLCHILDREN IN THE LESSONS OF THE NATIVE LANGUAGE. Gospodarka i Innowacje., 22, 56-60.
10. Kochkorbaevna, K. B. (2022). The Role and Importance of People's Oral Creativity in the Development of Primary School Student Speech. International Journal of Innovative Analyses and Emerging Technology, 2(4), 57-61.
11. Kochkorbaevna, K. B., & Gulomova, O. (2022). Technologies for teaching students to think independently in the process of analyzing literary texts based on an innovative approach. International Journal Of Culture And Modernity, 13, 115-120.
12. Kochkorbaevna, K. B., & Hilola, I. (2022). Developing Pedagogical Abilities In Students Through Introducing Modern Forms And Methods Of Education In The Mother Tongue Teaching Process. International Journal Of Culture And Modernity, 13, 1-3.
13. Muhammedkadirovna, G. D. (2022). Main Categories of Media Text. International Journal of Discoveries and Innovations in Applied Sciences, 2(4), 63-68.
14. Mukhammedkadirovna, G. D. (2023). ABOUT INDIVIDUAL STYLES. Open Access Repository, 4(3), 730-736.
15. Mukhtoraliyevna, Z. S. (2022). INFORMATION TECHNOLOGIES IN EDUCATION. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 162-165.
16. Mukhtoraliyevna, Z. S., & Saminjanovna, M. S. (2022). Formation of Future Primary School Teachers Skills to Use Project Activities. Spanish Journal of Innovation and Integrity, 6, 346-353.
17. Muxtoraliyevna, Z. S. (2023). BOSHLANG ‘ICH SINF O ‘QUVCHILARINING IMLOSI USTIDA ISHLASHDA DIDAKTIK O ‘YINLARDAN FOYDALANISH. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 3(2), 473-478.
18. Rakhmonberdiyevna, T. S. (2022). RESEARCH OF CREATIVE ACTIVITY OF THE FUTURE PRIMARY CLASS TEACHER. Conferencea, 155-157.
19. Raxmonberdiyevna, T. S., & Shavkatjonqizi, S. M. (2021). Methods for the development of stochastic competence in mathematics lessons at school. ACADEMICIA: An International Multidisciplinary Research Journal, 11(5), 863-866.

20. Tojimamatovich, J. V. (2023). CONCEPT AND ESSENCE OF INFORMATION SECURITY.Web of Synergy: International Interdisciplinary Research Journal,2(4), 643-647.
21. Tojimamatovich, J. V. (2023). Digital Transformation of Educational Management System.Web of Semantic: Universal Journal on Innovative Education,2(4), 202-206.
22. Toshboyeva, S. R. (2020). Competent approach in teaching probability theory and mathematical statistics. EPRA International Journal of Research and Development (IJRD).
23. Valijonovna, K. I. (2023). The Significance of Didactic Games in the Development of Written Speech in Children. Journal of Pedagogical Inventions and Practices, 17, 139-142.
24. Valijonovna, X. I. (2023). AXBOROT TEXNOLOGIYALARI VOSITALARI ASOSIDA SAVOD ORGATISHGA OID KICHIK YOSHDAGI BOLALARNING KOMPETENTLIGINI SHAKLLANTIRISH. BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI, 3(4), 524-530.
25. Xoldarova , I. V., & Barakayeva, M. M. qizi. (2023). BOSHLANG'ICH TA'LIMDA INTERFAOL DARSLARGA QO'YILADIGAN TALABLAR. Innovative Development in Educational Activities, 2(5), 265–270.
26. Xoldarova, I., & Akbarova, M. (2023). AXBOROT TEXNOLOGIYALARI YORDAMIDA OQITISH PEDAGOGIK MUAMMO SIFATIDA. Евразийский журнал академических исследований, 3(5 Part 2), 155-160.
27. Zokirova Sohiba Mukhtoraliyevna, & Soliyeva Mohigul Madaminxon kizi. (2023). Mnemotechnique Techniques in Pedagogical Work with Primary School Students. Texas Journal of Philology, Culture and History, 17, 77–84.
28. Zokirova, S. M. (2016). About the congruent phenomenon in the contrastive linguistics. Sciences of Europe, (8-2 (8)), 45-46.
29. Zokirova, S. M. (2020). Ta'limda axborot texnalogiyalarining vujudga kelish tarixi. Молодой ученый, (18), 586-587.
30. Байджанов, Б. Х. (2020). Таълим жараёнида илғор хорижий тажрибаларни самарали қўллаш механизмлари. Science and Education, 1(2), 514-519.
31. Газиева, Д. М. (2020). МЕДИАТЕКСТ И ЗАКОНОМЕРНОСТИ ТЕКСТООБРАЗОВАНИЯ. In ПРОБЛЕМЫ ФИЛОЛОГИЧЕСКОГО ОБРАЗОВАНИЯ (pp. 141-146).