

THE ACTIVITY METHOD AS A MEANS OF TEACHING IN MATHEMATICS LESSONS IN ELEMENTARY GRADES

Levkina Maria Fedorovna*

*Candidate for the degree of Doctor of Philosophy,
Department of "Methods of Preschool and Primary Education",
Yeuju Technical Institute In Tashkent, UZBEKISTAN
Email id: levkina@gmail.com

DOI: 10.5958/2249-7137.2022.00675.9

ABSTRACT

The state standard of education provides for a departure from the traditional transfer of ready-made knowledge from a teacher to a student. The task of the teacher becomes not only clearly and accessible in the classroom to explain, tell, show everything, but to include the student himself in educational activities, to organize the process of independent mastery of new knowledge by children, the application of the acquired knowledge in solving cognitive, educational, practical and life problems. The activity method of teaching is the organization of the educational process, in which the main place is given to active and versatile, to the maximum extent independent cognitive activity of the student.

KEYWORDS: *Activity Method, Formation Of Key Competencies, Elementary Grade, Mathematics Lesson.*

INTRODUCTION

Today, the social order of society for education is fundamentally different from the previous one. And one of the main differences is that the new generation standard is based on a system-activity method. In connection with the new requirements imposed by the SES, the technology for designing the educational process and, above all, the specific forms of its implementation, the lesson and extracurricular activities, is changing.

The activity method of teaching is the organization of the educational process, in which the main place is given to active and versatile, to the maximum extent independent cognitive activity of the student.

In my practice, I use the technology of "activity method of teaching". At the same time, a new technology, a new way of organizing learning does not destroy the "traditional" system of activity, but transforms it, preserving everything necessary for the implementation of new educational goals.

The implementation of the technology of the activity method in teaching practice is provided by the following system of didactic principles:

The principle of activity is that the student, receiving knowledge not in a ready-made form, but, obtaining it himself, is aware of the content and forms of his educational activity, understands and accepts the system of its norms, actively participates in their improvement, which

contributes to active successful learning. the formation of his general cultural and activity abilities, general educational skills.

The principle of continuity means continuity between all levels and stages of education at the level of technology, content and methods, taking into account the age-related psychological characteristics of the development of children.

The principle of integrity - involves the formation by students of a generalized systemic understanding of the world (nature, society, oneself, the socio-cultural world and the world of activity, the role and place of each science in the system of sciences).

The minimax principle is as follows: the school must offer the student the opportunity to master the content of education at the maximum level for him (determined by the zone of proximal development of the age group) and at the same time ensure its assimilation at the level of a socially safe minimum (state standard of knowledge).

The principle of psychological comfort - involves the removal of all stress-forming factors of the educational process, the creation of a friendly atmosphere at school and in the classroom, focused on the implementation of the ideas of pedagogy of cooperation, the development of interactive forms of communication.

The principle of variability - involves the formation of students' abilities for a systematic enumeration of options and adequate decision-making in situations of choice.

The principle of creativity means the maximum orientation towards creativity in the educational process, the acquisition by students of their own experience of creative activity.

- The use of this method in practice allows us to correctly build a lesson, to include each student in the process of “discovering” new knowledge.
- A feature of the activity method is the independent “discovery” of new knowledge by children in the process of research activity. This contributes to the fact that knowledge and learning skills acquire personal significance for students.
- The activity method is a universal tool that provides the teacher with tools for preparing and conducting lessons in accordance with the new goals of education.
- The activity approach to learning involves:
 - the presence of a cognitive motive in children (the desire to learn, discover, learn) and a specific educational goal (understanding what exactly needs to be found out, mastered);
 - performance by students of certain actions to acquire the missing knowledge;
 - identification and development by students of a method of action that allows them to consciously apply the acquired knowledge;
 - formation of schoolchildren's ability to control their actions - both after their completion and along the way;
 - inclusion of the content of education in the context of solving significant life tasks.
- In the technology of the activity approach, children "discover" knowledge themselves in the process of independent research activity. The task of the teacher when introducing new

material is that he must organize the research work of the children so that they themselves think of solving the problem of the lesson and explain themselves how to act in the new conditions.

- Setting a learning task means helping students to formulate the topic of the lesson themselves.
 - There are 3 possibilities for setting a learning problem in a lesson.
 - 1. Creating a problem situation (the most difficult, but also the most effective technique).
 - 2. Lead-up dialogue
 - 3. Message by the teacher of the topic of the lesson in finished form, but using a motivating technique.
 - The educational problem is posed and the search for a solution begins. Essence: the teacher helps students to discover new knowledge. This is where opinion is put forward and tested.
 - At the next stage, children discover new knowledge as a result of joint actions of the teacher and students.
 - The teacher builds a mathematics lesson in the 1st grade on the basis of the technology of the activity method. In this research lesson, children, in the course of cooperation, together with the teacher, "discover" new knowledge, derive the rule for rearranging the terms. This is facilitated by a benevolent atmosphere in the classroom, the mood of children for activity, the "spirit of discovery", maintaining a sense of success, creating an opportunity in the lesson to express their opinion, put forward their assumption. The knowledge acquired by students in the classroom has a practical orientation.
 - The lesson organizes the development by students of universal educational activities such as:
 - - personal - installation on a benevolent attitude towards the participants in joint activities: classmates, teacher, all those present;
 - - awareness of the importance of each lesson at school;
 - - regulatory - installation on the education of volitional self-regulation;
 - - implementation of control in the form of comparison of their work with a given standard;
 - - the ability to give an emotional assessment of their activities and the activities of the class in the lesson;
 - - communicative - the ability to perform various roles in the lesson: student and teacher; cooperate with classmates when performing tasks in pairs, in a group;
 - - cognitive - the ability to analyze, compare;
 - - the ability to use various sources of information (in this case, a textbook), to navigate in a textbook
 - A collectively distributed educational activity is being implemented with a gradual transition to independent educational activity with elements of self-education and self-education (at the stages of primary consolidation and independent work)
-

- Summarizing the above, we can conclude that the activity approach in learning is a necessary condition for mastering knowledge. To organize the activity of the student, the teacher moves from the position of a carrier of knowledge to the position of an organizer of cognitive activity. The modern school requires that the primary school student not have a system of knowledge, skills and abilities in itself, but key competencies in the intellectual, social, communicative and information spheres. The activity approach in the formation of positive educational motivation of younger students contributes to the optimal combination of fundamental and practical knowledge, the development of thinking.
 - The structure of lessons for introducing new knowledge usually looks like this:
 - I. Motivation for learning activities (organizational moment) - 1-2 minutes
 - Purpose: the inclusion of students in activities at a personally significant level.
 - This stage of the learning process involves the conscious entry of the student into the space of learning activities in the classroom. To this end, at this stage, his motivation for educational activities is organized, namely:
 - the requirements for it from the side of educational activity are updated (“must”);
 - conditions are created for the emergence of an internal need for inclusion in educational activities (“I want”);
 - a thematic framework (“I can”) is established.
 - Workmethods:
 - the teacher at the beginning of the lesson expresses good wishes to the children, offers to wish each other good luck (clapping hands);
 - the teacher invites the children to think about what is useful for successful work, the children speak out;
 - motto, epigraph (“Little luck starts big success”, etc.)
 - II. Actualization and fixation of an individual difficulty in a trial educational action - 4-5 minutes
 - Purpose: repetition of the studied material necessary for the “discovery of new knowledge”, and identification of difficulties in the individual activity of each student.
 - The emergence of a problem situation.
 - Methods for setting a learning problem:
 - inciting, leading dialogues;
 - motivating technique “bright spot” – fairy tales, legends, fragments from fiction, cases from history, science, culture, everyday life, jokes, etc.)
 - III. Setting a learning task - 4-5 minutes
 - Purpose: Discussing the difficulty (“Why are there difficulties?”, “What do we not know yet?”)
-

- At this stage, the teacher organizes the students to identify the place and cause of the difficulty.
- To do this, students must:
- restore performed operations and fix (verbally and symbolically) the place – step, operation, where the difficulty arose;
- correlate your actions with the method of action used (algorithm, concept, etc.) and, on this basis, identify and fix in external speech the cause of the difficulty - those specific knowledge, skills or abilities that are not enough to solve the original task and tasks of this class or type in general.
- IV. Discovery of new knowledge (building a project for getting out of a difficulty) - 7-8 minutes
- At this stage, students in a communicative form consider a project for future learning activities: set a goal (the goal is always to eliminate the difficulty that has arisen), agree on the topic of the lesson, choose a method, build a plan to achieve the goal and determine the means - algorithms, models, etc. This process is led by the teacher: at first with the help of an introductory dialogue, then a prompt one, and then with the help of research methods.
- V. Primaryfixing - 4-5 minutes
- Purpose: pronunciation of new knowledge, (recording in the form of a reference signal)
- frontal work, work in pairs;
- commenting, designation with iconic symbols;
- VI. Independent work with self-test according to the sample (standard) - 4-5 minutes.
- Everyone must draw a conclusion for himself that he already has.
- A small amount of independent work is carried out in writing (2-3 typical tasks).
- Selfcontrol, selfcheck.
- VII. Inclusion of new knowledge in the knowledge system and repetition - 7-8 minutes.
- First, the children are given tasks that contain
- newalgorithm, newconcept.
- Then tasks are offered in which new knowledge is used together with previously learned ones.
- VIII. Reflection of educational activity in the lesson (total) - 2-3 minutes.
- Purpose: students' awareness of their learning activities, self-assessment of the results of their activities and the whole class.
- Questions:
- What task was set at the lesson?
- Did you manage to solve the task?

- How?
- What are the results?
- What else needs to be done?
- Where can new knowledge be applied?
- What did you do well in the lesson?
- What else needs to be worked on? and others.
- An example of a lesson using a system-activity approach.
- Math lesson in 3rd grade.
- Topic: “Division with 0 and 1”.
- Purpose: to form the ability to perform special cases of division with 0 and 1.
- I. Organizational moment:
 - good wishes from the teacher, children wish each other good luck;
 - What will be useful to us for successful work at the lesson? (statements of children);
 - checking homework according to the model.

II. Knowledge update:

$$8 : 2 = \dots$$

$$6 : 2 = \dots$$

$$4 : 2 = \dots$$

Reasoning according to the plan:

one). It is necessary to find a number, when multiplied by 2, it turns out (8, 6, 4);

2). This number.....;

3). So $__ : 2 = __$

III. Statement of the educational task:

- You will formulate the topic of the lesson yourself, after completing the assignments;
- When performing assignments, reason according to the standard (the reasoning plan is on the board).

IV. Discovery of new knowledge:

- We will work in groups;
- What rules of work in groups should be remembered?

Task number 1.

$$0 : 4 = \dots$$

$$0 : 6 = \dots$$

0 : 3 = ...

0 : 5 = ...

0 : 9 = ...

0:23 =...

0 : 17 =...

0 : 32 = ...

Conclusion: 0: a = ...

Conclusion: 0: a = ...

Conclusion: 0: a = ...

- representatives of the groups write down conclusions on the board, voice them;
- write conclusions in a notebook of discoveries.

Task number 2.

4 : 4 =...

8 : 8 = ...

6 : 6 = ...

5 : 5 =...

8 : 8 = ...

3 : 3 =...

7:7=...

9 : 9 = ...

Conclusion: a : a = ...

Conclusion: a : a = ...

Conclusion: a : a = ...

- representatives of the groups write down conclusions on the board, voice them;
- write conclusions in a notebook of discoveries.

Task number 3.

4 : 1 =...

2 : 1 =...

5 : 1 =...

6 : 1 =...

9 : 1 =...

7 : 1 = ...

8 : 1 = ...

5 : 1 = ...

Conclusion: a : 1 = ...

Conclusion: a : 1 = ...

Conclusion: a : 1 = ...

- representatives of the groups write down conclusions on the board, voice them;
- write conclusions in a notebook of discoveries.

Task number 4.

5 : 0 = ...

7 : 0 = ...

4 : 0 = ...

6 : 0 = ...

9 : 0 = ...

Output: a : 0

Output: a : 0

Output: a : 0

- representatives of the groups write down conclusions on the board, voice them;
- write conclusions in a notebook of discoveries.

Summing up the results of work in groups (encouragement from the teacher, statements of children):

- who will be able to formulate the topic of the lesson? (children's statements).

V. Primary fastening:

- How can we test our findings? (children's statements: look in the reference book, in the textbook);
- open page 95 in the textbook; read the topic of the lesson, the rule (conclusions);
- compare your conclusions with the conclusions of the textbook (children's statements);

VI. Independent work with self-test according to the standard:

- p. 95 No. 3 – to be done in writing;
- How will you work independently?

VII. Repetition.

- p. 95 No. 4 - make 1 example for each equality;

Front check.

VIII. The result of the lesson (reflection of activity):

- what discovery did you make today?
- how did you find out?
- where can new knowledge be applied?
- what was difficult for you?

BIBLIOGRAPHY

1. Asmolov A.G. "How to design universal educational activities in elementary school. From action to thought". M: Education, 2010.
2. Mamurov, B.B. axiological approach in the preparation of future teachers for the design of the educational process. pedagogical education science, 120 .https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=_aXmRXUAAA AJ&cstart=20&pagesize=80&alert_preview_top_rm=2&citation_for_view=_aXmRXUAAA AJ:4DMP91E08xMC
3. Mamurov B.B. Acmeological approach to the upbringing of the younger generation in the heritage of their ancestors.
http://www.manpo.ru/manpo/publications/ped_obraz/n2016_03.pdf#page=147
4. Mamurov B.B., Makhmudov M.Kh. Acmeological component of the educational culture of teachers. philosophical and methodological.