American Journal of Interdisciplinary Research and Development
ISSN Online: 2771-8948
Website: www.ajird.journalspark.org
Volume 16, May, 2023

METHODS OF TEACHING MATHEMATICS IN PRIMARY GRADES

Rahmatjonzoda is the son of Ahrorjon Ahmat
Teacher of the External Department of FerSU

Annotation:
In the article allows students' work to determine their level of preparation for certain sections of the program, to monitor their growth and development during a certain period of training. For example, special written and graphic work is carried out with the purpose as a result of the examination, children's knowledge and skills in mathematics should be clearly visible; opinions are expressed about the factors that show that students are progressing and to what extent, performing such special tasks in a certain period of time

Keywords: factor, basis, technology, opinion, reflection, teacher, child, writing.

Introduction

Arithmetic material is the main content of the course. The main core of the elementary course consists of the arithmetic of natural numbers and basic quantities. In addition, this course integrates the basic concepts of geometry and algebra. The elementary school mathematics course is an organic part of the school mathematics course. The most basic and age-appropriate elementary concepts of mathematics taught in grades V-XI are given. In higher grades, these concepts are taught in an expanded, deepened and enriched manner. So, the content of elementary school mathematics determines the content of high school mathematics. The structure of elementary mathematics has its own characteristics: 1. Arithmetic material is the main content of the course. Arithmetic of natural numbers, basic quantities, introductory courses of elements of algebra and geometry are taught in addition to arithmetical material without being taught in the form of a main section. 2. Primary grade material is structured concentrically. For example, if first the numbering is taught, then the numbering within 100 and performing arithmetic operations are taught. After that, perform arithmetic operations within 1000, then multi-digit numbers. Along with teaching these, numbering, quantities, fractions, algebraic and geometrical materials are also taught. 3. Theory and practical issues are organically connected. 4. Mathematical concepts, properties, and the discovery of legal connections are interconnected in the course. 5. Each concept is explained in detail. For example, before teaching arithmetic operations, its exact essence is revealed, then the properties of the operation, then the connection between the components, then the result of the operation, and finally the connection between the operations is given. The main concepts and the resulting concepts are given in the interconnection. For example, multiplication is based on addition. The elementary mathematics course includes parts of

arithmetical, algebraic and geometrical material. A concentric arrangement of arithmetic material is maintained in the elementary mathematics course. However, in the current program, the number of counters is reduced: tens, hundreds, thousands, multi-digit numbers. It should also be said that the material is grouped in such a large way that the interconnected concepts, actions, and issues are viewed in time. At the same time as studying the properties of arithmetic operations and appropriate calculation methods, connections between the results and components of arithmetic operations are revealed. (For example, if one of the addends is subtracted from the sum, the second addend is formed.) Changes in the results of arithmetic operations are observed when one of the components changes. The introduction of elements of algebra meets the goals of deep, understood and generalized mastery: the concepts of equality, inequality, equation, variable are revealed on a concrete basis. Starting from the 1st grade, numerical equalities and inequalities (4=4, 6=1+5, 25, 8-3< 8-2, etc.) are considered. Their study is connected with the study of arithmetical material and helps to reveal it more deeply. Starting from the 2nd grade, equations of the form (x+6)-3=2, etc. are considered. Solving the equations is performed first by the method of selection, and then based on the knowledge of the connections between the results and components of the operations. Practical testing with a variable allows students to acquire functional imagination. Geometric material serves the purpose of introducing children to the simplest geometric figures, developing their spatial imagination, as well as showing arithmetical laws and connections. (For example, the representation of a rectangle divided into equal squares is used to reveal the permutation property of multiplication...). Starting from grade 1, straight and curved lines, cross sections, polygons and their elements, right angles and rectangles are introduced. Students should learn to imagine geometric figures, name them, and make them simple on checkered paper. In addition, they should master the ability to find the length of the cross section and broken line, the perimeter of a polygon, a rectangle, a square, and the face of any figure in general (with the help of a palette). Concept of teaching method. PDF created with pdfFactory Pro trial version www.pdffactory.com 13 The goals of teaching mathematics in primary grades are as follows: general education goal, educational goal, practical goal. These goals are interrelated and complement each other. 1. The educational goal requires the following from the teacher. a) imparting knowledge, skills, and competences to students from the system of mathematical knowledge; b) studying the real world with mathematical methods; c) to improve oral and written speech of students, to ensure its quality; g) it is necessary to provide students with such knowledge in mathematics that through this knowledge, through active cognitive activities, their knowledge, skills, and abilities increase. 2. Educational purpose. It is necessary to teach students to be persistent, diligent, thorough, to be able to control their thoughts and conclusions, and especially to achieve the fluency of the opinions expressed on the basis of observation. Symbols are used in mathematics to represent relationships between quantities. This is the mathematical language that needs to be developed. The task of the teacher should be to teach to transfer the mathematical idea expressed in symbolic language to the mother tongue. The desire to know should cultivate the feelings of self-satisfaction. Teaching mathematics itself educates

students to focus and concentrate. The teacher must ensure the following: a) the student can understand connections, changes in quantities, and their relationship with each other in the material world; b) to ensure students' keen interest in learning mathematics; d) education of attitude to work, homeland and people, formation of aesthetic taste; g) education of the worldview of the history of the Uzbek nation, including the history of mathematics education; d) education of students' thinking ability and mathematical culture; 3. Practical purpose. The observed practical goal of teaching mathematics is to teach students to apply the acquired knowledge in practice. To be able to apply the acquired knowledge to operations performed on numbers and mathematical expressions, points, to learn how to use them in solving various problems. It is teaching to be able to apply the knowledge to solve problems encountered in everyday life. The concept of teaching method is one of the main concepts of didactics and methodology. Thus, teaching methods perform three main tasks: mastering, educating and developing. It is necessary to study the classification of all teaching methods in order to consciously choose from the teaching methods, those that correspond to the new content and new tasks of education. 1. Information about scientific research methods. It is impossible to develop pedagogy without studying and summarizing work experiences related to pedagogical training, without deep research of the pedagogical process. Modern education equips pedagogy with the general method of scientific knowledge, but like any other science, pedagogy has its own research methods. Scientific research methods are methods of obtaining scientific information for the purpose of establishing legal connections, relationships, connections and constructing scientific theories. It includes observation, experience, familiarization with school documents, study, interviews and questionnaires, scientific pedagogical research methods. Recently, the use of mathematical and cybernetic methods, as well as modeling methods, has been noted. The methods used in all pedagogical studies are used in the teaching methodology of primary mathematics. 2. Observation method. The method of observation is the direct perception of the pedagogical process in a goal-oriented way, with appropriate recording of the results of observation under normal conditions. The observation method is used to study how work is progressing in one or another field of educational work. This method makes it possible to collect factual material about the activities of teachers and students in an unforced natural environment. During the observation, the researcher does not interfere with the normal course of the educational process. Monitoring is carried out over a short or long period of time based on a specific target. Observation progress, facts, happenings, equipment are recorded in the observation diary. Tracking can be continuous or selective. In continuous observation, a larger phenomenon is observed (for example, cognitive activities of young students in mathematics lessons), and in selective observation, small-scale phenomena (for example, independent work of students in mathematics lessons) are observed. Decision writing or journaling is the simplest method of recording observations. But the most reliable method of recording observations is the use of technical means, video, photo and cinematography, telescreen. One of the used observation methods is the study and generalization of advanced pedagogical experience. The mandatory main condition for the successful use of this method

is that the description of teachers' experience should meet the research task (in our country, a great deal of work is being done to study advanced pedagogical experience. The generalization of this experience is reflected in the process of using information technologies in the collections of materials of scientific-practical conferences and pedagogic studies, monographs and journal articles). 3. Experiment An experiment is also an observation, conducted in a specially organized, researcher-controlled and systematically modified environment. Pedagogical experience is used in researching the effectiveness of one or another method of teaching and upbringing, instruction manuals. Before conducting the experiment, the researcher should clearly state the issues to be investigated, the solution of such issues should be important for school practice and the science of pedagogy. Before conducting the experiment, the researcher familiarizes himself with the theory and history of the subject of study, as well as with practical work experience in this field. The role of scientific hypothesis in research is of great importance. The organization of the entire experiment is directed to the verification of a scientific hypothesis. It allows you to determine the ways of collecting material, does not allow the researcher to get confused in the factual material. Analysis of the results of the experiment is carried out by the method of comparison. For this, two or more groups are formed, the composition of the students in these groups should be as uniform as possible in terms of preparation levels and other indicators. In the same classes, work is carried out on experimental material specially developed by the researcher. For comparison, control classes are selected, these classes should be approximately equal to the experimental classes in terms of the composition of students, their knowledge levels, and the methods, tools, etc. used in the mathematics experimental classes are not used in these classes. Other methods of obtaining objective information about the results of the experiment are also used: 1. In the experimental classes, the initial conditions are somewhat more favorable than in the control class; if good results were obtained in experimental classes under such conditions, it is justified to solve the problem experimentally; 2. Two classes with approximately the same composition of students are taken; a new solution to the researched problem is used in one of these classes, and then it is used in a second class in other subject materials; if a new method in such application gives good results, this method will be justified. Before starting the experiment, during its intermediate stages and at the end, the knowledge of students of all classes is checked. Based on the analysis of the obtained data, the researched method, method, etc. conclusions about effectiveness are made. A conclusion is made based on the analysis of the qualitative and quantitative results obtained from the experimental classes. There are different ways to quantify quantities (by mastery, comparing correct and incorrect answers, etc.). Experimental verification of some important rules is carried out by means of a public experiment. 4. Study of school documents. One of the common methods of pedagogical research is the study of students' works and documents. Students' work allows to determine their level of preparation for certain sections of the program, to monitor their growth and development during a certain period of training. For example, special written and graphic works are conducted with the aim that as a result of their examination, children's knowledge

and skills in mathematics should be clearly visible; doing specific tasks like this over a period of time shows that students are making progress and to what extent. It is important to analyze the mistakes made by students in their written work. Such an analysis allows to determine the complex difficulties faced by students of the whole class, as well as the individual characteristics of students in mastering mathematics.

List of Used Literature

1. Mahpuza A., Rahmatjonzoda A., Zilola X. ATTITUDE TO MATHEMATICS IN PRIMARY SCHOOL STUDENTS //European International Journal of Multidisciplinary Research and Management Studies. – 2022. – T. 2. – №. 11. – C. 208-212.
2. Mahpuza, Ahmedbekova, Ahrorjon Rahmatjonzoda, and Xursanova Zilola. "ATTITUDE TO MATHEMATICS IN PRIMARY SCHOOL STUDENTS." *European International Journal of Multidisciplinary Research and Management Studies* 2.11 (2022): 208-212.
3. Mahpuza, A., Rahmatjonzoda, A., & Zilola, X. (2022). ATTITUDE TO MATHEMATICS IN PRIMARY SCHOOL STUDENTS. *European International Journal of Multidisciplinary Research and Management Studies*, *2*(11), 208-212.
4. Ahrorjon R. Initial Pedagogical Processes in The Direction of Primary Education Students to The Profession //Texas Journal of Multidisciplinary Studies. – 2021. – T. 2. – C. 85-87.
5. Ahrorjon, Rahmatjonzoda. "Initial Pedagogical Processes in The Direction of Primary Education Students to The Profession." *Texas Journal of Multidisciplinary Studies* 2 (2021): 85-87.
6. Ahrorjon, R. (2021). Initial Pedagogical Processes in The Direction of Primary Education Students to The Profession. *Texas Journal of Multidisciplinary Studies*, *2*, 85-87.
7. Ra'noxon S., Mahpuza A., Rahmatjonzoda A. THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF LOGICAL THINKING WITH THE HELP OF INNOVATIVE TECHNOLOGIES //Web of Scientist: International Scientific Research Journal. – 2022. – T. 3. – №. 11. – C. 881-885.
8. Ra'noxon, Sharofutdinova, Ahmedbekova Mahpuza, and Ahrorjon Rahmatjonzoda. "THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF LOGICAL THINKING WITH THE HELP OF INNOVATIVE TECHNOLOGIES." *Web of Scientist: International Scientific Research Journal* 3.11 (2022): 881-885.
9. Ra'noxon, S., Mahpuza, A., & Rahmatjonzoda, A. (2022). THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF LOGICAL THINKING WITH THE HELP OF INNOVATIVE TECHNOLOGIES. *Web of Scientist: International Scientific Research Journal*, *3*(11), 881-885.
10. Mahpuza A., Rahmatjonzoda A. THE USE OF MODERN PEDAGOGICAL TECHNOLOGIES IN MATHEMATICS LESSONS IN ELEMENTARY SCHOOL //European International Journal of Multidisciplinary Research and Management Studies. – 2022. – T. 2. – №. 11. – C. 213-217.

11. Mahpuza, Ahmedbekova, and Ahrorjon Rahmatjonzoda. "THE USE OF MODERN PEDAGOGICAL TECHNOLOGIES IN MATHEMATICS LESSONS IN ELEMENTARY SCHOOL." *European International Journal of Multidisciplinary Research and Management Studies* 2.11 (2022): 213-217.
12. Mahpuza, A., & Rahmatjonzoda, A. (2022). THE USE OF MODERN PEDAGOGICAL TECHNOLOGIES IN MATHEMATICS LESSONS IN ELEMENTARY SCHOOL. *European International Journal of Multidisciplinary Research and Management Studies*, *2*(11), 213-217.