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METHODOLOGY FOR DEVELOPING MATHEMATICAL LITERACY SKILLS IN PRIMARY CLASS STUDENTS

Dilbar Daminova
Teacher of the Department of Primary Education
Methodology of Termiz State Pedagogical Institute

Abstract
The article focuses on the formation and development of the system of mathematical knowledge and skills necessary for mathematical literacy in elementary school students. The essence of mathematical literacy as an activity is revealed, such as conducting mathematical reasoning, applying mathematical concepts, methods, facts and tools.

Keywords: mathematics, reasoning, problem solving, mathematical literacy, context, mathematical concepts and symbols.

Introduction

The educational process is being enriched with innovative pedagogical technologies, approaches, interactive methods, computerization and communication conditions are being provided, the indicators of coaching services are increasing in relation to the training of mature specialists.
The President's decision "On measures to improve the quality of education in the field of mathematics and to develop scientific researches" was adopted. In accordance with the decision , the priority directions of improving the quality of education in the field of mathematics, developing scientific researches and putting scientific developments into practice were determined.

Analysis and Results

Mathematics is the basis of knowledge of the universe and the world, and it is of great importance in revealing the specific laws of events and phenomena around us. Mathematician without knowledge work release and the development of science imagination by doing it won't be . That's why also for math culture universal of culture structural part is considered and of our mathematical society all to the fronts very big cultural contribution adds. It is known that mathematics sharpens the human mind, develops focus, cultivates determination and will to achieve the desired goal, teaches discipline in an algorithmic way and most importantly, encourages reasoning, problem solving, innovation and expands thinking.
Honorable President Sh.M. Mirziyoyev as noted: "Mathematics everyone to the sciences base This is science good A child who knows is smart , broad thoughtful being grows , desired in the field successful work goes ."Educating the young generation worthy of our great scholars such as Muhammad al-Khorazmi, Ahmad al-Farghani, Abu Rayhan Beruni and Mirza Ulugbek, who made a great contribution to the creation of the foundations of the science of mathematics, conveying modern knowledge to students and the secrets of mathematics of the youth of our country It is considered both a debt and a duty to create conditions for them to enjoy.

The integration of our country into the world community, the development of science and technology, requires the young generation to master the sciences in order to be competitive in the changing world. This is ensured by introducing international experience and models into the education system, including teaching mathematics.

The main goal of teaching mathematics is to form and develop the system of mathematical knowledge and skills necessary for students to use in daily activities, learn subjects and continue their education; formation of a person who can successfully operate in a rapidly developing society, who can think clearly and clearly, critically and logically; It is to educate the students' creativity directed to design by connecting their practical activities through observations, to show and develop their skills of creative, critical thinking and logical analysis, curiosity, problem solving, and creation of news.

Mathematical literacy is an individual's ability to formalize, apply, and interpret mathematics in a variety of contexts. It involves mathematical reasoning, applying mathematical concepts, methods, facts, and tools to understand, explain, and predict phenomena. Mathematical literacy helps people to understand the place of mathematics in the world, to make the judgments and decisions necessary for a constructive, active and thinking citizen.

of mathematical literacy includes the ability to work with mathematical tools. These include physical and digital devices of 21st century technology that are widely accepted and continue to expand . Obviously, having these skills is a prerequisite for the success of modern man.

Three interrelated aspects underlie the organization of a mathematical literacy assessment:

1. In assignments used mathematician concepts set (content)
2. Oman _ present which situation (context)
3. B is in context given the problem to solve necessary has been mathematics with tie up for student activities describing mathematician mental processes .

The concept of mathematical literacy has been interpreted differently in different years of research. According to the results of the latest research, it can be defined as follows: critical thinking; creativity, creativity; research and analysis; independence, initiative and determination; use of information; systematic thinking; communicate; reasoning.

Mathematical literacy is a person's ability to think mathematically about various life situations (contexts) and problems, to be able to express a given problem using mathematics, to be able to use mathematics in solving a problem, and to be able to use the obtained results to interpret and evaluate the solution to the problem. He events description , explanation and in advance telling to give for concepts , algorithms , facts and tools own into takes _ He is to people of mathematics in the world place to understand and creative , curious and himself himself analysis 21st century citizens necessary has been based on judgment and decisions acceptance to do help gives[2].

Mathematician literacy each one to the person mathematics the world to understand , his a person in his life held place and importance to understand , active , thoughtful and of work the eye knowledgeable (constructive) 21st century citizen for necessary is reasonable _ considerations conduct through acceptable decisions acceptance to do abilities in itself to form help gives[3].

TIMSS - international monitoring program of the quality of education in mathematics and natural sciences, organized by the International Association for the Evaluation of Educational Achievements (IEA). This study helps to compare the level and quality of students' knowledge of mathematics and natural sciences in different countries, and to identify differences in national education systems.

TIMSS first conducted in 1995 by the International Association for the Assessment of Educational Achievement. Its main difference from previous comparative studies in the field of mathematics and science education was the combination of two subjects in one training (mathematics and natural sciences). Until 1995, comparative studies in the field of mathematics and natural science education were conducted separately. In 1999, the TIMSS study mainly used the methods and tools of the 1995 study and was therefore called **TIMSSR - TIMSS-Repeat . It** was held only in 8 classes .

Since 2003, TIMSS has become a monitoring study and has been renamed " Trends in Mathematics and Science Study ". Its main purpose is a comparative assessment of the quality of education in mathematics and natural sciences among students of the 4th and 8th grades of the general secondary education system . Every four years, the academic achievements of students in grades 4 and 8 are assessed, which include not only knowledge and skills, but also their attitudes, interests and motivation towards subjects. The research is planned in such a way that its results allow to observe trends in mathematics and natural science of the participating countries every 4 years when students of 4th grade become 8th graders . Thus, the educational progress of students is monitored in primary and secondary schools , and changes in mathematics and natural science are observed during the transition from primary school to primary school.

research conducted by the IEA before 1995 was conducted in the same cross-section . The 1995 TIMSS survey was not conducted in one section , but in two consecutive sections of grades 3-4 and 7-8 . This approach had important advantages. It made it possible to cover students of a certain age group and to evaluate academic achievements . For example, in the 1995 TIMSS study, the population of seventh- and eighth-grade students covered nearly the majority of thirteen-year-olds. At the same time, it was possible to compare, observe and analyze the changes in the educational achievements of students of different ages. For example, a comparison was made with the educational achievements of eighth-grade students at the age of 13.5 years and the academic achievements of seventh-grade students at the age of 12.5 years, and thus the educational effectiveness of one year of study was determined[4].

1995 According to D. Uyl and R. Wolf, experts who worked on the TIMSS research concept , the approach used in the first phase of TIMSS work was a compromise between traditional concepts and research , and students ' scientific gave more information about his achievements. More attention has been paid to the study of the factors affecting the educational results than in the usual case studies focused only on a certain age or year of students[5].

It should also be noted that in the 1995 TIMSS study, the task was to compare the academic achievements of students at different levels in the school , so three groups of students were selected . One sample consisted of elementary grades (3-4), in which nine-year-old students made up the majority . The second group consisted of two classes (7-8) of the thirteen-year-old primary school . The third group includes high school graduates.

Unlike the first and second samples , which cover all general secondary schools of the countries participating in the TIMSS study , the 3rd group was formed in such a way that it included students studying on the basis of general education programs and deepening mathematics and physics. The study also included graduating students from specialized schools. This made it possible to obtain information about the level of natural-mathematical literacy of high school graduates and the ability to apply basic knowledge and skills in mathematics and natural science acquired at school in different

situations. In addition, it was possible to compare the students' preparation in mathematics and physics at the time of graduation , and to choose their future profession before graduation.

Contexts related to personal life are usually related to the daily life of the student, family, friends and peers (communication with classmates, sports activities, shopping in stores, recreation, housework).

in Educational/Professional contexts relate to school life or social activities. They measure, calculate the price, purchase materials for construction (for example, to make a bookshelf for the school math room), pay for the order, and perform the inspection work.

Social contexts relate to the life of a community (local, national or universal). Situations related to the local community are devoted to problems that arise around the student (for example, currency exchange, bank deposits). Problems arising in the wider society include electoral systems and problems related to election results (for example, predicting the results of presidential elections), transport, government decisions, demographic problems, national statistics and economic issues.

Contexts related to scientific activities are usually devoted to mathematics, science and technology, and physical phenomena (for example, drawing conclusions about whether an earthquake will occur on the basis of available statistical data). In these contexts, the problems of weather or climate, ecology and medicine, space, genetics can be considered. They include theoretical questions (for example, different population distributions) or purely mathematical problems that are not directly related to real life (for example, finding the third side of a triangle given two sides).

Conclusion

Competency approach to mathematics education assumes that students acquire various types of skills that allow them to act effectively in situations encountered in professional, personal, and everyday life in society. Thus, in the competence approach, the basis of mathematical education is focused on strengthening the practical, applied directions. Teaching children in detail how to use math effectively, as well as introducing them to and helping them acquire all the skills, tools and knowledge they need to take on any task with confidence and enthusiasm throughout the year provides insights.

We all want our children to succeed in math. Too often, an overreliance on math test prep materials steals study time, while harming learning and motivation. Textbook and study Methodical the manual in creating international of states advanced experiences was studied. International organizations of experts recommendations in consideration received In the textbook topics simple , understandable in language , vital issues using illuminated and colorful pictures with decorated Interdisciplinary integration provided. Textbook basically in students mathematician knowledge, imagination, thinking, logical and independent thinking to develop directed being their opportunities, age, individual characteristics, XXI century skills have to be in consideration received without written Assignments simply complex towards spiral way developed goes.

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