# AN INNOVATIVE APPROACH TO IMPARTING MATHEMATICAL KNOWLEDGE TO STUDENTS WITH MENTAL RETARDATION

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**Annotatsiya.** Ushbu maqolada intellektida nuqsoni boʻlgan bolalarni hayotga moslashuvida matematika fanining oʻrni, hamda uni tashkil etishda innovatsion texnologiyalarni qoʻllashning oʻziga xos jihatlari yoritilgan.

**Kalit so'zlar:** nogironlik, imkoniyati cheklangan bolalar, intellektida nuqsoni bo'lgan bolalar, matematika, innovatsion texnologiya.

**Аннотаtsія.** В данной статье представлена роль математики в адаптаtsіи детей с ограниченными интеллектуальными возможностями к жизни, а также особенности использования инноваtsіонных технологий.

**Ключевые слова:** инвалидность, дети с ограниченными возможностями, дети с ограниченными интеллектуальными возможностями, математика, инноваtsioнные технологии.

**Annotation.** This article describes the role of mathematics in the adaptation of children with intellectual disabilities to life, as well as the features of the use of innovative technologies.

**Key words:** disability, children with disabilities, children with intellectual disabilities, mathematics, innovative technologies.

#### Introduction

After the independence of Uzbekistan, as in all areas, deep reforms and changes took place in the system of social protection of children. In the course of the development of Uzbekistan as a legal state, the protection of the interests of each citizen, regardless of their gender, nationality, race, age, has been defined as the main factor to ensure the supremacy of the law.

Nowadays, we must emphasize that every child in our country should be treated as a full natural person by the rights of our state. The reforms given by the Ministry of Public Education are taken from the "Convention on the Rights of the Child" issued by the State. In modern conditions, the use of new innovative technologies in conducting professional activities in various fields ensures consistent, continuous, systematic and purposeful organization of professional activities. When these innovative technologies are effectively used, taking into account all positive and negative factors or rationally eliminating them based on

their content creates the opportunity to use them appropriately and efficiently. We need to use effective innovative educational technologies for the future generation to improve their social adaptation to life and find their place in life. Organization of an effective educational process requires the search for new innovative pedagogical technologies for personal development, a creative approach to every issue.

Nowadays, great attention is paid to the process of education of the next generation. The President of the Republic of Uzbekistan has emphasized that it is one of the urgent tasks of today to raise the young generation to be healthy-thinking and to express their opinion freely. Accordingly, 2023 was declared the year of "Attention to people and quality education".

Not only healthy children, but also children with disabilities are growing in our country. Of course, the support of this category of children is one of the great tasks facing our country. In Uzbekistan, many laws and decisions are being developed and implemented to help children find their place in life and their future. As an example of this, if we take the fourth direction of the Action Strategy of the Republic of Uzbekistan for 2017-2021, humanitarian ideas, compassion and special attention to children with limited opportunities are emphasized in it.

In accordance with the Decree No. PF-5712 of the President of the Republic of Uzbekistan dated April 29, 2019 "On approval of the concept of development of the public education system of the Republic of Uzbekistan until 2030", development of inclusive education in Uzbekistan, improvement of the education system for children with special educational needs and the quality of educational services provided to them many improvements are being made.

## Methodology

There are many people with limited opportunity in our society. It is important that these people have their place in society without being inferior to anyone else. Every person can have some weak side and some strong side. If we could organize the educational process in accordance with the requirements of the time, we would help people with disabilities to find their place in life. People with disabilities include people with intellectual disabilities. Mathematical science, like all other sciences,

has a special place in helping them find their place in life. Accordingly, it is appropriate to organize scientific-pedagogical activities with the help of innovative technologies aimed at relatively eliminating the difficulties of children with intellectual disabilities in mastering mathematics.

If we help children to master the first mathematical knowledge thoroughly from a young age, it will be a great help for them to acquire a profession in the future. Every field is inextricably linked with mathematics. Before starting a job, it must be calculated in advance and its advantages and disadvantages are calculated. Or even before going to the store, work is done depending on whether there is enough money for the desired product or not. All of this is important for children to master the numbers 1 to 10 in 1st grade, and to teach them the skills of performing arithmetic operations in a way that connects them to life in general, and is important in mastering the more complex numbers that follow is counted.

When teaching numbers to children, it is necessary to give special emphasis to each of them, to perform various practical activities with the participation of this number. Today is considered the age of technological development. Accordingly, covering the topic with the use of technical tools in each lesson increases students' interest in science. For example: when explaining the number 1 to students, the concept of 1 and many is given. The student is shown 1 subject and a set of such subjects. 1 set of pencils and colored pencils. The student feels this by holding it with his own hand, and then it is shown and passed on to several other subjects. The more examples of objects are shown, the better the student's imagination will remain. Flashcards can be used for reinforcement based on more examples. In forming the student's ability to work with modern technologies, showing examples of the topic through technical assistants such as computers, tablets, and phones increases the student's interest in the lesson and strengthens his knowledge.

#### **Results**

The activities of teachers are multifaceted, they have to perform the roles of manager, communicator, guide, organizer and evaluator. Today, the interest and attention to the use of innovative technologies, pedagogical and information

technologies in the educational process is increasing day by day, one of the reasons for this is that until now traditional education has If students are taught to acquire only ready-made knowledge, modern technologies teach them to search for the acquired knowledge by themselves, to study and analyze independently, and even to draw their own conclusions. In this process, the teacher creates conditions for the development, formation, learning and education of a person, and at the same time performs the function of management and guidance. In the process of education, the student becomes the main figure. Knowledge, experience, and interactive methods of pedagogical technology and pedagogical skills ensure that students acquire knowledgeable, mature skills.

Active use of advanced innovative pedagogical technologies in the special education system, increasing the effectiveness of education, analysis and implementation is one of the urgent tasks of today. It is extremely important to develop the range of thought and worldview of students with intellectual disabilities, to turn them from free listeners to free participants. The teacher should become the manager of the lesson, and the students should become the participants. In order to cope with this situation, innovation activities have a multifaceted effect. The responsibility of primary school teachers is unlimited. In today's period of renewal and spiritual upliftment, education of knowledgeable, creative young people is one of the main requirements of today.

Nowadays, education has become more relevant in the development of the countries of the world. Great attention is being paid to the effectiveness of educational work in our republic. Because the development and prospects of our republic largely depend on the high intellectual level of students. To put it more simply, education is not just giving lessons, explaining the subject, giving advice. In this regard, it is desirable to apply active, innovative, more perfect methods of teaching, to use new tools wisely in practice. There are various factors that have a positive and negative impact on the formation of a child's personality. It is known that parents and pedagogues cannot find a way to children's hearts without knowing their psyche. It is necessary to know the child's psyche in order to acquire the skills

to communicate with children, encourage them to be active, teach them to think independently and creatively, and develop existing abilities. In this case, pedagogues rely on the system of psychological knowledge. Each subject of the lesson is aimed at helping students find their place in life, it is important that it is conducted using innovative technologies, taking into account the interests of students.

#### **Conclusion**

Recommendations for organizing mathematics lessons:

- 1. Always take into account the interests of students in the lesson;
- 2. Arming with modern knowledge and skills;
- 3. Use of gaming technologies;
- 4. Taking them on excursions to places such as stores, pharmacies, and household services in order to gain the necessary knowledge in life;
  - 5. Always enrich the lesson with news;
  - 6. It is necessary to get students to actively participate in the lesson.

The main task of the specialized school is to eliminate the shortcomings of the intellectual development of students with disabilities, to prepare them for social life and productive activities. It is necessary to base on these main tasks when determining the tasks of teaching mathematics to secondary school students. Teaching mathematics involves not only the acquisition of certain knowledge and skills of children with mental retardation, but also the general development of cognitive abilities such as perception, memory, thinking, and imagination. The work carried out in this direction allows them to teach important methods of mental activity, perform mental operations such as analysis, synthesis, comparison, generalization, concretization. In the process of mathematical education, students' speech develops, their vocabulary is enriched with special mathematical terms and expressions. Mathematics education allows to form freedom, chaos, and will in a person.

### Literature

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