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EFFECTIVENESS OF THE USE OF INNOVATIVE TECHNOLOGIES IN SPEECH DEVELOPMENT OF STUDENTS WITH INTELLECTUAL DISABILITIES AND THE RESULTS OBTAINED THEREFROM

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Abstract: This article presents the effectiveness of the use of innovative technologies for the development of the speech of mentally retarded students and the results obtained from it. Based on the State requirement, a variant program is created based on the speech development program for mentally retarded students of the Specialized School, which includes the purpose, task, principles, methods, and innovative technology (wordwall) of the program, and through this platform, interactive, interesting games are presented to develop the speech of mentally retarded students. The educational experiment was conducted in the 2nd grade Uzbek group, and the results are presented in the tables.

Keywords: Program, educational, educational correctional puzzle, multilova, puzzle, collage, tablet, syncway.

INTRODUCTION

Nowadays education system supports advanced technologies. Living in the age of digital technology, we strive for an innovative, specialized, and advanced way of life. Developing the speech of mentally retarded students in specialized schools with innovative, interactive methods plays a leading role in helping them to overcome speech deficiencies more quickly, integrate into society, and communicate with others in this society on a par with their peers. If such innovative technologies are used not only to develop the speech of mentally retarded students, but also to eliminate deficiencies in other cognitive processes, the achievement of efficiency will be higher. It is necessary to develop speech and eliminate speech deficiencies in order for mentally retarded students to work as professionals in the future and form self-service skills.

Methodology

In order to reveal the effectiveness of using innovative technologies in developing the speech of students with intellectual disabilities and speech defects, a program was created from a speech development lesson for 2nd grade Uzbek group students of a specialized auxiliary school:

VARIATIVE PROGRAM
in the subject of "SPEECH DEVELOPMENT" f
or children in need of special assistance
for specialized (mentally disabled) schools and boarding schools
(Grade 2)

Explanatory letter

The program is **based** on the need of the time to develop the speech of students with intellectual disabilities in the 2nd grade of the Specialized School and the effectiveness of digital technologies in general as innovative technologies.

It is highlighted the topics that 8-9-year-old students with intellectual disabilities should know and the level of their speech, and how many words they should know based on their age, and the importance of new words in the vocabulary after each topic is covered. The program platform is as follows:

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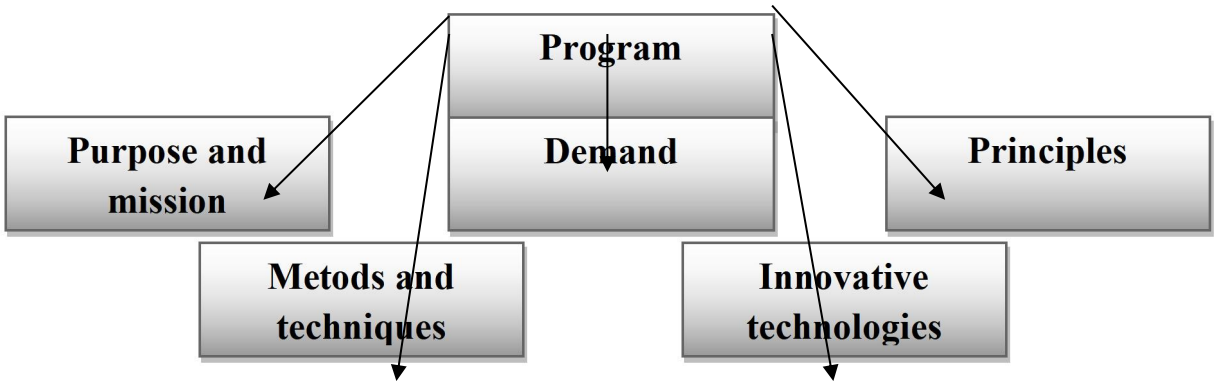

The purpose of the program:

Educational: To focus the attention of students with intellectual disabilities on the subject, increase their vocabulary, learn to analyze processes, and strengthen their perception. To correctly perform tasks through games in applications.

Upbringing: To teach students with intellectual disabilities to be careful not only with people, but also with objects or animals, to explain the connection between living and inanimate nature, to develop skills in such characteristics as what to wear in which season of the year?

Correctional-developmental: To eliminate speech deficiencies in students with intellectual disabilities, to increase vocabulary, and to eliminate deficiencies in writing skills.

Methodology of the program:

- To enable 2nd grade students with intellectual disabilities to demonstrate themselves in traditional lessons using innovative technologies: to acquire new knowledge, master the lexical and grammatical components of speech on the topic;
- To achieve results in a timely manner and develop phonetic and phonemic perception;
- To be able to pronounce words not only mechanically, but also with understanding, to distinguish between synonyms or antonyms;
- To help teach them to develop coherent speech on the topic, to use appeals to establish connections.

Program requirements:

- The topics in the program are simple, based on the young material of students with intellectual disabilities, and students should have certain knowledge and skills on both grounds;
- It is necessary to use innovative technologies to better understand the topic and facilitate analysis;
- Students' speech, vocabulary and grammar must be understood.

Principles used in the program:

1. The principle of scientificity - education should be scientifically based, consistent with reality.
2. The principle of systematicity and consistency - knowledge and skills should be given in a systematic and logical sequence
3. The principle of the connection of theory with practice - the learned theoretical knowledge should be applied in practice.
4. The principle of educational effectiveness - education should have an educational effect, should form personal qualities.
5. The principle of activity and independence - students should be allowed to be active and independent in acquiring knowledge.
6. The principle of adaptability - it is necessary to adapt to the age, individual characteristics and capabilities of students.
7. The principle of interaction and cooperation - there should be effective communication and cooperation between the teacher and the student.

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8. The principle of demonstrativeness - knowledge is better absorbed when it is presented using visual aids.

Educational methods used in the program:

- Oral (conversation, question and answer);
- Written;
- Practical methods;
- Innovative methods.

Methods used in the program:

Table 1.

S/n	To develop vocabulary	
	Name of the methods	Number of tasks
1.	“Puzzle” method	2
2.	“Collage” method	1
3.	“We will place it in the wagons”	2

Table 2.

S/n	To develop speech from a grammatical perspective	
	Name of the methods	Number of tasks
1.	“Tablet” method	2
2.	“Sinquain” method	2

Innovative technologies in the program:

- Interactive games on topics were created using the “Wordwall” program. (Appendix)
- A question-and-answer part of the experiment on the topic was created using the “kahoot it” program. (Appendix)
- Development of lexical and grammatical aspects of the speech of students with intellectual disabilities through the “You tube” “Toddler” application from the multi-language tools. (Appendix)

Expected results:

- Development of the speech of students with intellectual disabilities using innovative technologies;
- Mastering new topics within a specified time frame;
- Knowing what the student with intellectual disabilities is learning through perception;
- Focusing his attention, that is, focusing on the lesson and the new topic;
- Independent, complete and error-free completion of the tasks (hereinafter referred to as tasks) given for each topic.

The evaluation criteria were as follows:

Table 3.

In the grading system	Descriptive
Three points (3)	Excellent (Completed independently)
Two points (2)	Good (With assistance)
One point (1)	Satisfactory (Completed with errors)
Zero points (0)	Unsatisfactory (Could not complete the task at all)

Grade 2

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(7 hours)

The main requirements for the student's skills and knowledge:

Students must have knowledge of both subjects, be able to use words correctly in text and oral speech, and understand and answer questions such as who is doing what, how, and what. Since the speech development lesson is directly related to the native language lesson, students must know the letters not by heart mechanically, but through thinking, and be able to write words by connecting letters, and understand the meaning of words. They must express sentences and connected speech through external speech.

Topics:

Pets (3 hours) In addition to pets such as dogs, cats, horses, and sheep, students must know the names of domestic animals such as rabbits, camels, goats, and cows, their nutrition, and why such animals are kept at home.

Spring (4 hours) The queen of the seasons should distinguish spring from the other seasons and, in the topics taught so far, study the events that occur in the summer, autumn, and winter seasons, and gain information on how many and what months each season consists of, why studying the seasons is necessary in life, and develop knowledge and skills. The topic should be consolidated.

Based on the program, an experimental test was conducted. In order to find out how effective the use of innovative technologies was, 14 students of the 2nd grade were divided into two groups. Each group had 7 students, and the first group of students participated in the experiment. An experiment was conducted for the first group of students using the methods presented in the program and innovative technologies designed to increase their impact. Students with good, satisfactory and unsatisfactory grades in the emphatic experiment were selected for the experimental test. (In order to achieve the result)

Results.

The following results were obtained from the experiment conducted to increase students' vocabulary under the program:

Table 4.

S/n	Methodology	Number of students	The percentage of students completing the task			
			Points 3	Points 2	points 1	points 0
1.	“Puzzle” 2 tasks	7	3 (42,8%)	1 (14,3%)	1 (14,3%)	2 (28,6%)
		7	2 (28,6%)	1 (14,3%)	1 (14,3%)	3 (42,8%)
2.	“Collage” 1 task	7	4 (57,1%)	1 (14,3%)	1 (14,3%)	1 (14,3%)
3.	“Let's put it in the wagons”	7	4 (57,1%)	1 (14,3%)	1 (14,3%)	1 (14,3%)

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	2 tasks	7	3 (42,8%)	1 (14,3%)	2 (28,6%)	1 (14,3%)

The following results were obtained from an experiment conducted to improve the grammatical component of speech among students under the program:

Table 5.

T/r	Metodika	Number of students	The percentage of students completing the task			
			Points 3	Points 2	points 1	points 0
1.	“Tablet” 2 tasks	7	2 (28,6%)	1 (14,3%)	1 (14,3%)	3 (42,8%)
		7	2 (28,6%)	1 (14,3%)	3 (42,8%)	1 (14,3%)
2.	“Sinquain” 2 tasks	7	3 (42,8%)	1 (14,3%)	1 (14,3%)	2 (28,6%)
		7	1 (14,3%)	1 (14,3%)	2 (28,6%)	3 (42,8%)

This table presents the results obtained based on the educational experiment, in which students with intellectual disabilities in the experimental group achieved the specified result based on innovative technologies.

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