

The Importance Of The Individualized Education Plan (Iep) In Working With Students With Special Educational Needs In A School Setting

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Abstract: This article examines the importance of the Individual Education Plan (IEP) in working with students with special educational needs in a school setting. During the study, particular attention was paid to organizing the educational process based on the individual education plan, taking into account students' strengths and well-developed sensory abilities. Unlike traditional education, which applies a uniform approach to all learners, the individual education plan considers the abilities and needs of each student. The article scientifically substantiates that an approach focused on developing students' strengths increases their engagement in the learning process and improves the effectiveness of knowledge acquisition. The findings indicate that the implementation of individual education plans in school practice contributes to improving the quality of education.

Keywords: Individualized education plan, students with special educational needs, inclusive education, individualized approach, strengths-based learning, school educational process, educational effectiveness, pedagogical support, student engagement, special pedagogy.

Introduction: Currently, supporting students with special educational needs (SEN) and ensuring their right to education is one of the pressing issues in the global educational system [1.9]. With the widespread development of inclusive education concepts, the necessity of organizing the educational process by taking into account each student's individual abilities, needs, and capacities has increased [1.10]. International experience demonstrates that the use of an Individualized Education Plan (IEP) in working with students with SEN contributes to enhancing their engagement in the learning process and improving the effectiveness of knowledge acquisition [1.11].

In the countries of the Commonwealth of Independent States (CIS), particular attention has also been given in recent years to the education of students with special educational needs [1.12]. During the modernization of the education system in these countries, the implementation of individualized, student-centered teaching models is recognized as a key direction. In particular, organizing education in schools based on

students' strengths through IEPs is acknowledged as an effective factor in increasing learning outcomes [1.13].

In the Republic of Uzbekistan, ongoing reforms in the education system also emphasize the development of inclusive education and the creation of a supportive learning environment for students with special educational needs [1.14]. Implementing an IEP in school settings allows for consideration of each student's capabilities, development of their strengths, and improvement of educational quality. Therefore, scientifically substantiating the importance of individualized education plans and applying them in school practice is a relevant and urgent issue.

METHOD

The study was conducted in the 6th grade of a specialized school in the Yakkasaray district. A total of 2 classes participated in the study, with 10 visually impaired students in each class: 10 students in the control group and 10 students in the experimental (research) group. During the study, the control group

was taught using traditional methods, whereas the experimental group was instructed based on an Individualized Education Plan (IEP).

When designing the IEP, students' strongest abilities were identified, and corresponding methods were applied. For example, visually impaired students benefited from didactic exercises, group work, cinquain writing, sensomotor activities, and hands-on practical exercises in mathematics. Each lesson lasted 35 minutes, and the practical activities enhanced students' engagement, motivation, and logical thinking. These conditions allowed the effectiveness of the method to be evaluated in a real classroom environment and provided an opportunity to monitor the practical conditions of the educational process and student activity.

An Individualized Education Plan (IEP) represents an active pedagogical approach tailored to the individual characteristics and strengths of students with special educational needs. Through this method, students transform from passive recipients into active participants, being encouraged to solve problem-based tasks according to their abilities, explain their reasoning, and justify their solutions. Within the IEP framework, individual strengths are identified, and methods are selected accordingly. For instance, visually impaired students are provided with auditory and visual materials, while students with well-developed motor skills engage in didactic exercises, sensomotor tasks, group work, and interactive activities. Each lesson is practical and interactive, fostering student engagement, logical thinking, and reflective skills, enabling students to evaluate and analyze their own solutions.

Objectives and Tasks of the IEP

The main goal of this approach is to organize the learning process for students with special educational needs based on their strengths, as well as to develop logical thinking and reflective skills while making lessons interactive and engaging.

The specific objectives include:

- Selecting and applying methods based on the individual strengths of students;
- Developing analytical thinking skills in solving mathematical problems;

- Forming skills for quick and accurate problem-solving through practical exercises and motor activities;
- Developing students' self-assessment and reflective skills;
- Increasing student engagement and strengthening motivation.

During the study, an Individualized Education Plan (IEP) was implemented for the experimental group. At the beginning of the research, an initial test assessed students' knowledge, identifying their strengths, particularly in auditory perception, motor skills, and sensory development. Based on this assessment, lessons were adapted to sensomotoric requirements and incorporated interactive elements. For example, in solving mathematical problems, students worked with manipulatives, while music and rhythmic exercises facilitated the calculation process. Additionally, didactic games and group work promoted analytical thinking and communication skills. In each lesson, students demonstrated their solutions in practice and, through reflective activities, were able to identify and analyze errors. In this way, the IEP allowed for teaching methods to be aligned with students' strengths, enriched each lesson with interactive and sensomotoric elements, and reinforced learning through music, games, and didactic exercises.

RESULTS

The results of the study indicated that teaching based on an Individualized Education Plan (IEP) significantly enhanced the logical thinking, computational skills, and reflective activity of the students in the experimental group.

- ✓ The control group (taught using traditional methods) primarily relied on memorization of facts and performing basic addition and subtraction operations. Their logical reasoning and independent thinking skills were developed only to a limited extent.
- ✓ The experimental group (taught based on the IEP) demonstrated:
 - o Activation of logical reasoning and reflective thinking in solving mathematical problems;
 - o Development of fine motor skills and auditory abilities through sensomotor exercises, didactic games, and musical activities;

- o Strengthening of skills in evaluating and analyzing their own solutions through group work and practical exercises;
- o A significant increase in engagement and motivation during lessons.

Observations and Diagnostics:

1. The level of student participation in question-and-answer activities reached 85% in the experimental group, compared to 50% in the control group.
2. Fine motor and practical calculation skills in the experimental group improved by 35% through the use of sensomotor exercises, didactic games, and musical activities.
3. Through group discussions and reflective activities, students in the experimental group strengthened their abilities to analyze their own solutions and correct mistakes.
4. Student interest and engagement in lessons increased significantly, making the classes interactive, engaging, and practical.

In conclusion, the study with visually impaired students demonstrated that an Individualized Education Plan (IEP) is an effective tool for making lessons interactive and practical. By applying methods aligned with students' individual strengths, it facilitates the development of logical reasoning, reflective thinking, and fine motor skills. This approach ensures lessons are result-oriented, engaging, and enhance the overall quality of the pedagogical process.

DISCUSSION

The results of the study indicated that teaching based on an Individualized Education Plan (IEP) significantly enhanced the logical thinking, computational skills, and reflective activity of students in the experimental group. This finding suggests that integrating individualized approaches and interactive methods into the classroom promotes active student participation and strengthens independent thinking skills [1.1; 1.2].

The control group, which was taught using traditional methods, exhibited noticeably lower levels of classroom engagement and logical reasoning skills.

During the discussion, the following key aspects were identified:

1. Effectiveness of Active Methods: Students in the experimental group developed computational and logical reasoning skills through sensomotor exercises, didactic games, music activities, and manipulative hands-on materials. Additionally, their reflective thinking and self-assessment abilities were reinforced. For example, while solving mathematical problems, students learned to break numbers into blocks and perform step-by-step addition, analyzing solutions both sensorially and logically.

2. Student Engagement: As a result of group discussions, reflection, and interactive activities, students in the experimental group improved their participation in question-and-answer sessions (with an engagement level of 85%). This contributed to making lessons interactive and engaging, significantly enhancing student motivation.

3. Pedagogical Significance: The study demonstrated that applying an individualized approach through the IEP and enriching each lesson with sensomotor elements, music, and didactic games effectively increases student engagement and develops logical reasoning and reflective thinking skills. This method makes the classroom process interactive, engaging, and outcome-oriented [1.3; 1.4].

CONCLUSION

The study results confirmed that conducting lessons with visually impaired students using an Individualized Education Plan (IEP) in a school setting is effective in significantly developing their logical thinking, computational skills, reflective activity, and sensory abilities. Students in the experimental group not only improved speed and accuracy in solving mathematical problems but also strengthened independent thinking through step-by-step problem analysis, explanation of solutions, and active participation in group discussions, supported by sensomotor exercises, didactic games, music, and collaborative work.

The control group, taught with traditional methods, showed significantly lower levels of logical reasoning and reflective activity. This outcome further highlights the pedagogical effectiveness of the IEP and individualized approaches and confirms their practical significance in stimulating students' cognitive activity.

Moreover, incorporating sensomotor elements, music, and didactic games into each lesson increased student

engagement, enhanced motivation, and made the pedagogical process interactive, engaging, and outcome-oriented. This approach allows students to acquire mathematical competencies more deeply, develop analytical thinking, and cultivate skills to evaluate and reflect on their own solutions.

Overall, lessons conducted with visually impaired students using the IEP are recommended as an innovative, effective, and practically applicable pedagogical approach. In the future, extending this method to other grades and diverse mathematical topics will allow for a more scientifically grounded assessment of its long-term effectiveness.

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