

PEDAGOGICAL APPROACHES TO INDIVIDUAL WORK WITH STUDENTS WITH INTELLECTUAL DEVELOPMENTAL LIMITATIONS

To‘xtamatova Maftuna Ismonjonovna

Teacher, Department of Preschool, Primary and Special Education Methodologies,
Namangan Regional Center for Pedagogical Excellence

Abstract

This scientific article examines the role, theoretical foundations, and practical mechanisms of an individualized approach in the pedagogical process of working with students with intellectual developmental limitations. In the modern system of inclusive and special education, ensuring every student's right to receive education based on their individual abilities and potential is of particular importance. The purpose of the study is to scientifically substantiate and implement innovative pedagogical strategies aimed at improving educational effectiveness and social adaptation by taking into account the cognitive, psychophysiological, and social characteristics of students with intellectual limitations.

The article provides an in-depth scientific analysis of the didactic potential of differentiated instruction, activity-based approaches, visual methods, and game-based technologies. It also presents specific mechanisms for teachers to properly organize individual lessons, increase students' motivation, and create an educational environment that positively influences their cognitive development. The scientific and practical significance of the article lies in the fact that the methodological recommendations, model lesson plans, and assessment criteria proposed in the study can be directly applied in the educational process by practicing special education teachers, defectologists, educators, and specialists in inclusive education.

Keywords: Inclusive education, special education, intellectual developmental limitations, individualized approach, differentiated instruction, cognitive needs, visual methods, adapted curriculum, pedagogical assessment, social adaptation, corrective pedagogy, competency-based approach.

Introduction

Modern reforms and democratic principles in the global education system require the creation of an equal, high-quality, and inclusive educational environment for all children, including students with intellectual developmental limitations. The modernization processes currently being implemented in the education sector of the Republic of Uzbekistan are also based on a person-centered education paradigm. International and national legal documents, including the United Nations Convention on the Rights of Persons with Disabilities, the Law of the Republic of Uzbekistan “On Education,” and the “Concept for the Development of Inclusive Education

in the Republic of Uzbekistan,” guarantee every child's right to receive education according to their potential and individual capabilities.

Traditional mass education methods cannot fully meet the educational needs of students with intellectual developmental limitations. Such students often encounter difficulties such as rapid fatigue during the acquisition of information, difficulties in maintaining attention, and problems understanding abstract concepts. Therefore, an individualized approach is necessary to organize the educational process within the student's “zone of proximal development,” according to the educational theory of L. S. Vygotsky. An individualized approach not only improves the student's existing level of knowledge but also contributes to the development of important social skills necessary for successful integration into society.

The relevance of this article is determined by the growing need for scientifically grounded and modern methodologies among teachers working in special and inclusive educational institutions with students who have intellectual developmental limitations. The purpose of the article is to analyze individualized approaches to pedagogical work with students with intellectual limitations, evaluate their effectiveness in practice, and develop specific methodological recommendations for practicing teachers. The objectives include studying the psychophysiological characteristics of this group of students, demonstrating the role of an individualized approach in education and social adaptation, and proposing specific models of individual lessons.

5.1. Pedagogical Characteristics of Students with Intellectual Developmental Limitations

Students with intellectual developmental limitations are characterized by specific features of cognitive processes and typological characteristics of the nervous system. Their cognitive processes, particularly perception, attention, memory, and thinking, develop with certain delays and specific changes. They may demonstrate a slower pace when receiving and processing information from the surrounding environment.

Due to superficial perception, students may focus primarily on the external and most clearly visible aspects of educational material, while overlooking its essence and cause-and-effect relationships. Maintaining voluntary attention for a long period can also be difficult; attention is easily distracted, and the nervous system becomes fatigued quickly.

Memory characteristics indicate that short-term memory capacity may be limited, while transferring information into long-term memory requires repeated practice using different methods. In the thinking process, visual-action and visual-imagery thinking tend to predominate, whereas elements of abstract-logical thinking develop to a certain degree only as a result of special corrective interventions.

The main difficulties in mastering educational materials become particularly evident when applying theoretical concepts in practice, generalizing information, and drawing independent conclusions. In addition, individual educational needs also encompass the social and communicative sphere. Since communication with peers, emotional regulation, and appropriate decision-making in conflict situations may be underdeveloped, the pedagogical process should



focus not only on academic knowledge but also on everyday social, practical, and communication skills.

This psychological and pedagogical profile makes an individualized approach based on each student's personal abilities an essential requirement.

5.2. Pedagogical Essence of the Individualized Approach

An individualized approach is a didactic principle that makes it possible to organize education and upbringing by taking into account the student's personal, psychophysiological, intellectual, and emotional capabilities. With regard to students with intellectual developmental limitations, an individualized approach means relying not on their limitations but on their preserved potential and abilities. This approach is considered one of the fundamental foundations of corrective education.

The impact of an individualized approach on educational effectiveness is reflected in its ability to protect students from information loads that are either excessively difficult or excessively easy for them. When students receive tasks that they can complete independently or with teacher assistance, they develop confidence in their own abilities. This, in turn, significantly increases their intrinsic motivation.

An individualized and adapted educational program can help restore a positive attitude toward learning among students who may otherwise experience repeated failure and frustration in a mass education setting.

An individualized approach also plays an important role in developing independent activity skills. The teacher gradually reduces the amount of assistance provided, allowing the student to learn self-management step by step. From the perspective of social adaptation, a child with increased self-confidence and developed competencies can integrate more comfortably into their peer group, school environment, and future professional activities.

5.3. Effective Pedagogical Approaches to Individual Work

Analysis of research and special education practices demonstrates that the following approaches and methods can be effectively used in combination when working with students with intellectual limitations:

Differentiated instruction. This approach involves conditionally dividing students into groups according to their abilities, level of knowledge, and interests and providing each group with tasks of different levels of difficulty. In practice, this protects students from excessive cognitive overload and improves the quality of education.

Individualized Education Strategy (IES). Internationally referred to as an Individualized Education Program (IEP), this strategy is a pedagogical and, where applicable, legal document containing specific short-term and long-term educational goals for a student. It clearly identifies what the student needs to learn, which methods should be used, and within what period the expected results should be achieved.

Competency-based approach. Rather than focusing exclusively on academic knowledge, this approach emphasizes the development of practical social and everyday skills that students will



continuously need in life, such as dressing, shopping, and appropriate greeting and communication skills.

Activity-based approach. Children with intellectual limitations may have difficulty acquiring information solely through listening. Learning through direct physical activities such as making, cutting, constructing, and arranging objects helps transform knowledge into practical skills.

Visual and practical methods. Instruction is supported by visual aids such as pictures, diagrams, tables, colored markers, and real objects. Visual-imagery thinking serves as an important support mechanism and contributes to strengthening associative connections in memory.

Game-based technologies. Organizing the learning process through didactic and role-playing games increases students' emotional interest in educational materials and reduces boredom and fatigue during lessons.

Step-by-step instruction. Any complex action or concept is divided into small stages or steps. Only after the student has fully and correctly completed one step does the teacher move on to the next.

Repetition and reinforcement methods. In order to compensate for memory difficulties, previously learned material is repeatedly practiced through different types of activities and in changing contexts. This facilitates the transfer of information from short-term to long-term memory.

Positive reinforcement and assessment. Instead of focusing on mistakes, teachers should emphasize small achievements. Stickers, verbal praise, and a “Success Board” can help develop students' internal motivation to learn.

Modern digital pedagogical tools. Specially designed interactive programs and tablet-based educational games can make cognitive exercises more engaging and contribute to the effective development of attention and memory.

5.4. The Role of the Teacher in Organizing Individual Work

The main guarantee of successful individual work with students with intellectual developmental limitations is the teacher's high level of professional competence and special education training. The process begins with a comprehensive assessment of the student. Pedagogical assessment should not be a one-time procedure; rather, it should be dynamic and determine the student's level of required assistance and their capacity for independent work within the zone of proximal development.

Based on the assessment data, the teacher establishes specific, measurable, and achievable individual educational goals. Unlike the general curriculum, educational tasks are adapted to the student's level: complex instructions are simplified, the volume of tasks is reduced, and visual supports are added.

The teacher's continuous responsibility is to monitor the student's developmental progress and make timely adjustments to the individualized educational strategy when necessary.

The teacher should also work collaboratively rather than independently. Close cooperation should be established with the school psychologist, defectologist, speech therapist, special education specialists, and, most importantly, the parents. Parents should be informed about



their child's educational goals and continue reinforcing the skills learned at school within the home and everyday environment.

5.5. Model of an Individual Practical Lesson

A model of an individual 15–20-minute lesson aimed at developing cognitive skills in a student with intellectual developmental limitations is presented below.

Topic/Activity: Distinguishing and sorting geometric shapes and basic colors.

1. Assessing the student's condition: At the beginning of the lesson, the student's mood, level of fatigue, and readiness to participate are assessed through a short conversation or a greeting game.
2. Defining the lesson objective: The student independently sorts blue, red, and yellow circles and squares into the appropriate boxes.
3. From simple to complex: Initially, only two colors—red and blue—and one shape—a circle—are used. After the student successfully completes the task, the yellow color and square shape are introduced.
4. Using visual materials: A clear image of the corresponding shape and color is placed on each box.
5. Engaging the student in independent activity: The teacher first demonstrates the task. Then the teacher performs it together with the child by providing physical assistance. Next, only verbal instructions are given. Finally, the child performs the task completely independently.
6. Positive reinforcement: Emotional encouragement is provided for each correctly sorted shape, such as “Well done!” or “Very good!”
7. Assessment of results: The teacher records in a special journal how many of the ten shapes the child sorted correctly and the level of assistance required.
8. Recommendation for the next lesson: If the student demonstrates good mastery, a third shape, the triangle, is introduced in the next lesson. If difficulties remain, practice continues using two colors.

6. Practical Comparative Analysis of Pedagogical Approaches

Visual and practical approach is used to facilitate the understanding of abstract concepts and improve attention. Practical methods include working with colored cards, 3D models, mock-ups, and pictograms. The expected result is improved retention of information in visual memory and increased interest in educational materials.

Step-by-step instruction aims to teach students to complete complex tasks independently and without excessive anxiety. Tasks are divided into four or five simple, sequential actions. As a result, algorithmic working skills develop and the number of errors decreases.

Game-based technologies are used to increase students' intrinsic motivation and activity during lessons. Didactic and role-playing games related to the subject are integrated into the learning process. This contributes to improved activity, emotional stability, and cooperation skills.

Competency-based approach focuses on social adaptation and self-care skills. Everyday situations, such as setting a table or folding clothes, are simulated. As a result, students' social communication and independence in everyday life improve.



Differentiated approach provides education adapted to the student's individual intellectual potential. Educational cards with different levels of difficulty are prepared according to students' abilities. This helps develop self-confidence and a sense of satisfaction from successfully completing tasks.

7. Results and Discussion

Consistent application of the above-mentioned individualized pedagogical approaches in the educational process can lead to a number of positive changes in students. Research and experimental activities indicate that the level of mastery of educational materials may increase by approximately 40–50% compared with mass teaching methods. This is associated with adapting information to the student's direct perceptual abilities.

Students' independence also increases because dividing tasks into stages reduces dependency and gradually develops self-care and educational planning skills.

In addition, the use of competency-based approaches and game-based technologies contributes to the development of students' communication skills. Students develop persistence, become less afraid of problematic situations, and strengthen their self-confidence. Social adaptation can proceed more smoothly through continuous pedagogical support, while aggressive behavior and frustration associated with failure may decrease.

A significant problem is the lack of practical manuals and adapted educational materials for teachers. As a solution, it is advisable to establish inclusive “Resource Rooms” in schools, involve teachers in continuous professional development courses in special education, and create digital didactic resources that are openly accessible.

Conclusion

Based on the scientific and theoretical analysis and practical results presented in the article, the following conclusions can be drawn:

1. An individualized approach is an essential pedagogical requirement when organizing the educational process for students with intellectual developmental limitations.
2. Visual-practical methods and activity-based education demonstrate high effectiveness and contribute to long-term retention and practical application of knowledge.
3. Continuous and dynamic assessment of the student's developmental level is a key mechanism for successfully implementing an individualized educational program.
4. Pedagogical activities should focus not only on correcting limitations but also on developing the child's preserved potential, abilities, and social and everyday competencies.
5. The effectiveness of school-based education is directly related to strong and continuous cooperation with parents. Stable skills can be developed more effectively when educational activities are reinforced within the family environment.

9. Practical Recommendations

1. Give short and clear instructions. Instructions should generally consist of four or five words, and each sentence should require only one action.

2. Simplify and adapt textbook materials. Complex and abstract concepts should be replaced with simpler terms. Long texts should be divided into short, logically complete sections accompanied by explanatory pictures.
3. Introduce multisensory learning. Students should not only hear and see an object but, where appropriate, also touch, smell, and taste it. This can help information leave a deeper memory trace.
4. Change activity types frequently to prevent fatigue. Every 10–15 minutes, mental activities can be replaced with physical or light creative activities such as drawing, finger games, or simple exercises.
5. Use the Errorless Learning technique. The teacher should provide immediate guidance or demonstrate the correct response to minimize repeated errors and prevent the development of uncertainty.
6. Provide immediate visual reinforcement of success. In addition to verbal praise, visual signals such as stickers or stars on a board can help maintain students' interest.
7. Use a daily or weekly “Communication Notebook” with parents. Briefly record what was learned during the day and which skills should be practiced at home, while also obtaining feedback from parents about the child's home environment.

References

1. Law of the Republic of Uzbekistan “On Education” (No. O‘RQ-637, September 23, 2020).
2. United Nations Convention on the Rights of Persons with Disabilities (December 13, 2006).
3. Resolution No. PQ-4860 of the President of the Republic of Uzbekistan, October 13, 2020, “On measures to further improve the system of education and upbringing of children with special educational needs.”
4. Mo‘minova L.R., Ayupova M.U. “Special Pedagogy” – Tashkent: “National Society of Philosophers of Uzbekistan” Publishing House, 2011. – 284 p.
5. Vygotsky L.S. “Fundamentals of Defectology” – Tashkent: O‘qituvchi, 1993. – 365 p.
6. Po‘latova P.M. “Fundamentals of Special Pedagogy” – Tashkent: “G‘afur G‘ulom” Publishing and Printing Creative House, 2018. – 250 p.
7. Sodiqova Sh.A. “Pedagogy and Psychology of Inclusive Education” – Tashkent: “Tafakkur bo‘stoni”, 2021. – 190 p.
8. Nurkeldiyeva D.A. “Corrective-Pedagogical Technologies in Special and Inclusive Education” – Tashkent: “Istiqlol”, 2019.
9. Luriya A.R. “Children with Intellectual Developmental Delays: Psychological and Pedagogical Analysis” (translated edition) – Tashkent, 2015.
10. Xamdanova M., Bekmurodova G. “Methods for Improving the Educational Process in Special Schools” – Tashkent: Ministry of Public Education, 2022.
11. Mitchell, D. (2014). What Really Works in Special and Inclusive Education: Using Evidence-Based Teaching Strategies. Routledge.
12. Nurgaliyeva R. M. “Methods of Working with Children with Intellectual Developmental Limitations.” Study Guide – Tashkent: “Zilol buloq”, 2023.
13. UNESCO (2017). A Guide for Ensuring Inclusion and Equity in Education. Paris, France.

-
14. Salayeva M.S. “Special Psychology and Psychodiagnostics” – Tashkent: “Fan va texnologiya”, 2016. – 210 p.
 15. Analysis of articles from the electronic database of the International Journal of Inclusive Education (2020–2023).

