

MODERN APPROACHES TO SPECIAL PEDAGOGY IN INCLUSIVE EDUCATION

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Abstract: This article provides an in-depth analysis of modern approaches to special pedagogy in the inclusive education system and their practical significance in the educational process. Inclusive education is a system aimed at creating equal and high-quality education opportunities for students with different abilities, in which the role of special pedagogy is invaluable. The article highlights new principles in the theory and practice of special pedagogy, as well as the importance of an individual approach and multidisciplinary teamwork.

The article considers modern approaches to special pedagogy, including the development of personalized educational programs, diagnostic and monitoring methods, pedagogical technologies and innovations, psychological support, and adaptation of the educational environment. It also presents strategies aimed at developing the individual capabilities and abilities of students with special needs in the educational process.

The article shows the possibilities for further developing inclusive education using modern technologies and a multidisciplinary approach. Practical recommendations are provided for educators, parents, and educational institutions, which are aimed at increasing the effectiveness of special pedagogy in inclusive education.

The results of the study emphasize the importance of introducing advanced methods and technologies in the field of special pedagogy and inclusive education, which play an important role in improving the quality of education and creating equal opportunities for all students.

Keywords: *inclusive education, special pedagogy, modern approaches, individual educational programs, psychological support, diagnostics and monitoring, pedagogical technologies, multidisciplinary cooperation, adaptation of the educational environment, equal opportunities*

Introduction: In today's era of globalization and digitalization, one of the main goals of the education system is to create equal conditions for every child to receive a quality education, regardless of his physical, mental or social capabilities. In this sense, the concept of inclusive education is gaining special importance as one of the important directions of the development of modern pedagogy. Inclusive education is a system of creating an integrated and tolerant educational environment in which all students, including children with special needs, can fully demonstrate their potential.

The role of special pedagogy in this process is invaluable. Because it offers scientifically based approaches to identifying the individual needs of students, supporting them psychologically, pedagogically and socially, as well as adapting the educational process. Modern approaches to special pedagogy serve not only to overcome the limitations that arise in the development of students, but also to their social integration and self-realization as individuals.

Currently, within the framework of the inclusive education system, new theoretical concepts, methodological solutions, as well as innovative methods based on information and

communication technologies are being widely introduced in the discipline of special pedagogy. An integrated model is being formed aimed at developing the personal potential of students through individualization of the educational process, strengthening multidisciplinary cooperation between teachers, psychologists, defectologists, speech therapists and parents.

In the effective organization of inclusive education, a diagnostic and monitoring system, monitoring the dynamics of students' mastery, adaptation of the educational environment, and psychological and pedagogical support play an important role. All this serves to improve the quality of education, enhance the social activity of students and ensure their successful adaptation to life.

Therefore, the main goal of this article is to analyze modern approaches to special pedagogy, determine their practical significance in the inclusive education system, as well as develop methodological recommendations for teachers and educational institutions. The results of the study emphasize the need to create equal opportunities for all students through the use of innovative approaches in the modern educational process.

Literature review

Scientific research in the field of inclusive education and special pedagogy shows that today the education system is based on the principles of humanity, equality and inclusion. In recent years, many foreign and domestic scientists have been conducting scientific research in this area. Their research comprehensively covers the modern concept of special pedagogy, individual approach methods, pedagogical technologies and social integration processes.

Internationally, the reports "Inclusive Education: The Way of the Future" published by UNESCO (2009, 2020) emphasize the need to make education inclusive and fair for all children. According to them, special pedagogy plays an important role not only for students with disabilities, but also for all children with specific educational needs.

Ainscow & Miles (2008) in their research emphasize the need to take into account social justice and cultural diversity in the implementation of inclusive education. In their opinion, the education system should be aimed at recognizing the individual differences of all students, and at forming them as full members of society.

Florian & Black-Hawkins (2011) developed new concepts of special pedagogy and identified the development of inclusive competencies of teachers as a key factor. In their opinion, teachers should accept not only children with special needs, but also every student in the classroom with their own unique opportunities and needs.

Also, the "Index for Inclusion" model developed by Booth & Ainscow (2016) is a practical guide to developing inclusiveness in educational institutions. This model helps to organize the learning environment, the teaching process and the management system in a convenient and open way for each student.

In the Republic of Uzbekistan, the inclusive education system has become one of the important directions of state policy in recent years. The Law "On the Rights of Persons with Disabilities" (2021) and the National Program for the Development of Inclusive Education for 2023–2026 have laid the foundation for the implementation of systemic reforms in this area.

Local scientists A.Abdurakhmonova (2020), studying the methods of individual approaches in special pedagogy, show the need to determine a personal educational path for each student. M.Murodova (2021), analyzing the effectiveness of the psychological and pedagogical support system in the process of inclusive education, emphasizes the importance of cooperation between teachers and psychologists.

Also, the research of I. Ismoilov (2022) substantiates the positive impact of the use of information and communication technologies on the motivation of students with special needs. He emphasizes that it is possible to increase the cognitive and social activity of students through modern educational platforms, interactive programs and adapted educational content.

The analysis of the literature shows that modern special pedagogy is being formed as a discipline that combines the theoretical and practical foundations of inclusive education. In international and local sources, the main attention is paid to the following areas: individualization of the educational process; adaptation and technological support of the learning environment; development of inclusive competencies of teachers; formation of a system of psychological, social and pedagogical support based on a multidisciplinary approach. Based on the analysis of these sources, it can be said that modern approaches to special pedagogy serve to reform not only children with special needs, but also the entire education system based on inclusive values.

Material and methods: The main goal of this study is to identify modern approaches to special pedagogy in the inclusive education system, assess their practical effectiveness and identify ways to improve the educational process. The direction of the study was focused on studying the principles of a person-centered education model, a diagnostic and monitoring system, innovative pedagogical technologies, psychological and pedagogical support, and multidisciplinary cooperation.

The study was conducted in a combination of theoretical and empirical approaches. Theoretically, international and national scientific sources on special pedagogy and inclusive education, advanced foreign experiences, and state regulatory and legal documents were analyzed. In particular, the UNESCO concept "Inclusive Education: The Way of the Future", the inclusive pedagogy model developed by Ainscow and Florian, as well as the Law of the Republic of Uzbekistan "On the Rights of Persons with Disabilities" and the "Program for the Development of Inclusive Education (2023–2026)" formed the theoretical basis of the study.

In the empirical part, experimental work was conducted, and the students' mastery indicators, psychological state, and level of social adaptation were monitored. The study was conducted in several general education schools and special educational institutions in Uzbekistan. A total of 120 students (of which 60 were children with special needs), 35 teachers, 10 psychologists and defectologists, and 40 parents participated in it. Consent was obtained from all participants, and ethical standards and human rights principles were strictly observed during the research process.

The study was carried out in three stages. At the first stage, the literature on the topic was studied, the theoretical foundations were analyzed, and the goals and objectives of the study were determined. At the second stage, practical data were collected using empirical observations, questionnaires, interviews, and test methods. At this stage, students' cognitive activity, participation in the lesson, psychological state, and the level of teachers' use of an inclusive approach were studied. At the third stage, the results obtained were analyzed and summarized on the basis of statistical data, and their effectiveness was scientifically substantiated.

Several methods were used in the research process. Analysis, comparison and generalization of scientific sources were carried out using theoretical methods. Observation, interviews, questionnaires, tests, diagnostics and psychological interviews were conducted as empirical methods. In assessing the pedagogical process, the results of students' mastery, active participation, level of self-confidence and social attitude indicators were analyzed. Statistical analysis was used to quantitatively process the obtained data, determine percentages, and present the results in the form of graphs and tables.

The scientific reliability of the study was confirmed by several factors: firstly, it was conducted based on theoretical sources and best practices; secondly, empirical data were collected in real inclusive classes; thirdly, qualitative and quantitative analysis methods were used in the study. The results were obtained based on criteria that allowed for repeated verification, ensuring their objectivity.

The research hypothesis is that if modern approaches to special pedagogy are systematically used in the process of inclusive education - individual educational programs, innovative technologies, psychological and pedagogical support and multidisciplinary

cooperation, then the level of mastery, social activity and personal development of students will increase significantly.

The results of the research are of practical importance for use in general education and special education institutions. They can be used as a practical resource in the process of training pedagogical personnel, in the creation of methodological manuals for teachers, as well as in improving educational policy.

Result and discussion: The modern education system in Uzbekistan is based on the principles of humanity, tolerance and equal opportunities, promoting the concept of inclusive education, which allows each student to fully realize his or her potential. Inclusive education is a system that ensures the right of all children, including those with differences in physical, mental, emotional or social development, to study and develop in the same educational environment.

Special pedagogy plays a special role in this process. Because special pedagogy is engaged in identifying the individual needs of each child, selecting appropriate teaching methods, providing psychological and pedagogical support and social integration. This discipline, by its nature, is based on the philosophy of education that is person-centered and aims to create a comfortable, fair and adapted learning environment for each student.

Also, special pedagogy uses an integrated approach in inclusive education, that is, it focuses on the comprehensive development of the student's personality based on cooperation between the teacher, psychologist, speech therapist, defectologist and parents.

The individual is at the center of the modern pedagogical process. Individual educational programs (IEPs) should be developed that are appropriate for each student's individual development pace, level of mastery and interests. This approach takes into account the cognitive, emotional and social needs of the student and determines the most effective teaching strategy for him. In an individual approach, curricula, assessment criteria, volume and level of complexity of tasks are adjusted depending on the individual's capabilities. As a result, students achieve success in accordance with their abilities and develop a sense of self-confidence.

A system of continuous diagnostics and monitoring is necessary to ensure the effectiveness of inclusive education. Diagnostics serves to identify the student's cognitive activity, speech development, socio-emotional state and learning difficulties.

Monitoring allows you to track the dynamics of student development, adjust teaching methods and, if necessary, develop corrective programs. Modern special pedagogy uses an integrated model of psychological and pedagogical diagnostics, which combines the activities of a teacher, psychologist and defectologist into a single system.

Today, the role of information and communication technologies (ICT) in the educational process is invaluable. Adaptive learning platforms, multimedia tools, audiovisual materials, and interactive programs specially designed for students with special needs facilitate the learning process. For example, subtitled video lessons are being created for students with hearing impairments, audio content and Braille materials for those with visual impairments. At the same time, programs such as "Inclusive EdTech", "SmartClass", "Assistive Reader" expand students' opportunities for independent learning. As a result of the introduction of technologies, students' motivation to study increases, their active participation in the educational process increases by 25–30 percent.

The success of inclusive education depends not only on the curriculum, but also on the psychological state and social adaptation of students. Therefore, psychological and pedagogical support plays an important role in the educational process. This process is carried out in the following areas: stabilizing the emotional state of students; helping them adapt to the social environment; developing self-esteem and positive self-confidence; training teachers in inclusive psychology. Art therapy, game activities, relaxation techniques, and group training are widely used as effective methods of psychological support.

Multidisciplinary cooperation is the main principle in the process of inclusive education. When working with a student, a teacher, psychologist, defectologist, speech therapist, medical worker, and parents act as a single team. This approach helps to comprehensively solve complex problems that arise in the development of students, develop personal development programs, and ensure the social integration of students. The effectiveness of the multidisciplinary model is that each specialist directs his knowledge and experience to a single goal - the comprehensive development of the student.

For the effective organization of inclusive education, the learning environment must be physically, psychologically and didactically adapted. This includes the following factors: equipping classrooms with adapted furniture, ramps and elevators; using pictograms, colored signs, interactive materials in lessons; adapting educational materials to the level of mastery of each student; creating a positive emotional environment and allowing children to express themselves freely.

Under such conditions, each child feels like a full member of society, his enthusiasm for learning and social activity increase.

For the effective implementation of inclusive education, teachers must have high inclusive competence. This is the teacher's ability to work with students with different needs, adapt the educational process, create individual programs and provide psychological support. It is necessary to organize special trainings, advanced training courses and seminars for teachers. At the same time, the exchange of experience and the development of a culture of teamwork will further increase the quality of inclusive education.

Today, digital technologies, socio-pedagogical innovations and global integration processes are creating new opportunities for the inclusive education system. In the near future, the following areas will be of great importance: the creation of adaptive educational systems based on artificial intelligence; the introduction of psychological monitoring in a digital educational environment; achieving individual results through a differentiated education management model; adapting inclusive education policy to international standards. Scientific and practical work carried out in these areas will allow inclusive education to be formed as a more effective and sustainable system.

The above analysis shows that modern approaches to special pedagogy form the foundation of the inclusive education system. Factors such as an individual approach, diagnostics, pedagogical technologies, psychological support, and multidisciplinary cooperation ensure students' self-awareness, realization of their potential, and successful integration into society.

Therefore, special pedagogy is recognized not only as a part of the educational process, but also as a key factor guaranteeing equal opportunities and quality education for all children. The study analyzed the effectiveness of special pedagogical approaches used in the inclusive education system. According to the results, it was found that the success of students in education is directly dependent on the availability of methodologies and a system of psychological and pedagogical support adapted to their individual needs. The data obtained show that modern special pedagogy is actively developing in the following main areas:

Individual educational programs are being developed taking into account the speed and abilities of students in acquiring knowledge. This provides a sense of success for each child and increases motivation. The diagnostic and monitoring system allows for continuous analysis of the educational process, assessment of the dynamics of students' development, and the development of individual correctional programs.

Pedagogical technologies increase the interactivity of the teaching process and improve the efficiency of students' learning by 25–30% (according to the results of observations of experimental classes). Psychological support reduces the level of stress among students and enhances social adaptation. Thus, through the use of innovative approaches in the educational process, the personal potential and social activity of each student are developed. During the study,

pedagogical observations were conducted in several general education institutions (inclusive classes). The analysis showed the following results:

Direction of analysis	Traditional approach	Modern approach (individual, technological, multidisciplinary)	Percentage of change
Student engagement	48%	78%	+30%
Level of learning	52%	80%	+28%
Self-confidence and social engagement	60%	85%	+25%
Level of parental involvement and cooperation	50%	83%	+33%

The results show that inclusive approaches significantly improve the quality of education, especially by strengthening the psychological environment and teacher-student mutual trust. The analysis revealed that a multidisciplinary team approach (teacher, psychologist, defectologist, speech therapist, parents) plays an important role in the social and intellectual development of students. As a result of such cooperation:

- students' social adaptation accelerated;
- communication skills improved;
- emotional stability increased;
- a positive attitude towards education was formed.

The practical implementation of a multidisciplinary approach provided a clear positive trend in the development of students. In this process, teachers achieved effective results by exchanging experience, developing joint lesson models, and analyzing monitoring results.

The use of digital technologies is one of the most actively developing areas of inclusive education. The results of the study show that: With the help of multimedia tools (audio, video, interactive whiteboards), student participation in the lesson increased by 1.5 times; Adaptive learning programs (e.g., "Special Needs EdTech," "Smart Learning Tools") have improved student achievement by 20–25%;

Online counseling and support systems have strengthened teacher-parent collaboration.

Such results of using technologies have increased the quality of education for students with special needs and expanded their opportunities for integration into society.

Psychological and pedagogical support has been crucial in strengthening students' self-confidence and ensuring their active participation in classes. According to observations:

- After individual psychological training, students' motivation increased by 40%;
- A positive atmosphere in student-teacher relationships has been strengthened;
- Stress and social anxiety have decreased.

These results prove that the psychological support system in inclusive education plays a crucial role in the personal development of students.

The results of the analysis show that:

Modern approaches to special pedagogy (individual, technological, psychological and multidisciplinary) work effectively as a complex system.

The introduction of innovative technologies in the educational process significantly increases the indicators of students' knowledge acquisition, self-expression and socialization.

Cooperation between educators and psychologists is an important factor in the full development of the student's personality. The development of inclusive competencies of teachers working in an inclusive environment is a prerequisite for the quality of education. The results confirm that modern approaches to special pedagogy strengthen the principles of sustainability, quality and humanity in the development of an inclusive education system.

Conclusion: The main goal of the modern education system is to create an equal, fair and high-quality educational environment for all children. In this sense, the concept of inclusive education is considered as a person-oriented pedagogical model that expands opportunities not only for students with special needs, but also for every child. The success of this system is directly related to the effective use of modern approaches to special pedagogy. The results of the study show that special pedagogy manifests its relevance in inclusive education through the following main areas:

Individual approach - increases the effectiveness of education by adapting curricula, taking into account the personal needs, abilities and capabilities of each student. Diagnostics and monitoring system - allows you to identify the dynamics of student development and continuously analyze the learning process.

Pedagogical technologies and innovations - simplify the process of learning for students through the use of modern information and communication technologies, actively involve them in education. Psychological and pedagogical support - stabilizes the emotional state of students, increases self-confidence and strengthens social integration.

Multidisciplinary cooperation - ensures the comprehensive development of students by establishing a team approach between a teacher, psychologist, defectologist, speech therapist, medical worker and parents. An adapted educational environment - creates physical, didactic and psychological conditions that meet the individual needs of students. These approaches require a comprehensive systematic approach to organizing inclusive education. The combination of personalized learning, advanced technologies and pedagogical innovations ensures not only the level of knowledge of students, but also their social adaptation and personal development.

In addition, the conducted analyses show that: as a result of the use of special pedagogical methods, students' activity in the lesson increased by 25-30 percent; the level of self-confidence in students who received psychological support increased by 40 percent; The quality of education in educational institutions that have established multidisciplinary cooperation has significantly improved.

This means that modern approaches to special pedagogy play a key role in creating an effective, inclusive and humane education system not only for students with special needs, but also for all learners. Generalized scientific results The success of inclusive education depends on the professional competence, psychological preparation and methodological skills of the teacher.

Modern approaches to special pedagogy allow for early identification of students' learning difficulties, the development of an individual development strategy and timely provision of corrective assistance. Innovative technologies increase the interactivity of the educational process and significantly improve the effectiveness of students' learning. It is necessary to organize continuous professional development, methodological manuals and scientific and practical seminars for teachers working in an inclusive environment.

The development of inclusive education is not just a reform of the education system, but a process that strengthens the cultural, moral and humane values of society. Thus, the introduction of modern approaches to special pedagogy increases the quality of the inclusive education system, implements the principles of justice, equality and humanism in education. Every child, regardless of their capabilities, has the right to receive education, develop and realize their potential. Thus, inclusive education is not just an educational policy, but a mirror of the cultural development and human values of society. And the effective application of scientific and practical approaches to special pedagogy is the most important factor in success in this direction.

References

1. Ainscow, M., & Miles, S. (2008). *Making Education for All Inclusive: Where Next?* UNESCO. Paris.

2. Abdurakhmonova, A. (2020). Methods of individual approach in special pedagogy. Tashkent: Publishing House of the Tashkent State University of Education. (Abdurahmonova, A. (2020). *Maxsus pedagogikada individual yondashuv metodlari*. Toshkent: TDPU nashriyoti).
3. Botirova, D. B., Abdullayeva, M. R., Khaydarov, I. Y., Khaydarova, R. N. A., & Sharofova, S. S. Social Psychological Features of the Process of Professional Stress in Pedagogical Activity. *Journal Power System Technology ISSN*, 1000-3673.
4. Booth, T., & Ainscow, M. (2016). *The Index for Inclusion: Developing Learning and Participation in Schools*. Bristol: Centre for Studies on Inclusive Education (CSIE).
5. Florian, L., & Black-Hawkins, K. (2011). *Exploring Inclusive Pedagogy*. Cambridge Journal of Education, 41(4), 413–430.
6. Farrell, M. (2017). *The Effective Teacher's Guide to Inclusive Education: Including Pupils with Disabilities and Additional Learning Needs*. London: Routledge.
7. Murodova, M. (2021). System of psychological and pedagogical support in inclusive education. *Journal of Pedagogy and Psychology*, No. 3, 42–48. (Murodova, M. (2021). *Inklyuziv ta'linda psixologik-pedagogik qo'llab-quvvatlash tizimi*. *Pedagogika va Psixologiya jurnalı*, №3, 42–48).
8. Ismoilov, I. (2022). The role of information technologies in special education. *Pedagogical Bulletin of Uzbekistan*, No. 2, 56–63. (Ismoilov, I. (2022). *Axborot texnologiyalarining maxsus ta'limdagi o'rni*. *O'zbekiston Pedagogika Axborotnomasi*, №2, 56–63).
9. Jo'rayev, A. (2020). Theoretical foundations and development prospects of inclusive education. Tashkent: Publishing House of Science and Technology. (Jo'rayev, A. (2020). *Inklyuziv ta'limning nazariy asoslari va rivojlanish istiqbollari*. Toshkent: Fan va texnologiya nashriyoti)
10. Khamidov, X. K., Bultakov, I. Y., Raxmanberdiyeva, K. S., Kasimova, S. S., & Sodiqova, S. B. (2024). Linguistic Expertise of Educational Literature: Analysis and Results. *Journal Power System Technology*, 48(4), 4017-4027.
11. Korayem, Sayed Mohamed Ahmed, Sharustam Giyasovich Shamusarov, Gulnora Sattorovna Mutalova, Buzakhro Marufjanovna Begmatova, and Nargiza Makhmudovna Saidova. "Calling for the Use of Intermediate Language in Teaching Arabic to Non-Native Speakers, Its Foundations and Problems." *Power System Texnology Journal, ISSN* (2024): 1000-3673.
12. Kasimova, S.S., 2024. Transformación de frases y sus destrucciones. *Salud, Ciencia y Tecnología-Serie de Conferencias*, (3), p.740.
13. UNESCO (2023). *Inclusive Education Resources and Policy Updates*. Retrieved from: <https://www.unesco.org/inclusiveeducation>
14. UNICEF Uzbekistan (2022). *Inclusive Education in Uzbekistan: Progress and Challenges*. Retrieved from: <https://www.unicef.org/uzbekistan>
15. World Health Organization (WHO). (2021). *Disability and Education: Global Report*. Retrieved from: <https://www.who.int>