# ENSURING THE INTEGRATION OF SCIENCE AND EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES.

International online conference.

Date: 19<sup>th</sup> May-2025

# METHODS TO ENHANCE TECHNOLOGICAL COMPETENCE OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS.

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**Annotation:** This article examines the main aspects, methods, and practices of developing technological competence among students with special educational needs.

**Keywords:** differential education, individual approach, mobile applications, individualization, inclusive education, didactic needs, diversification.

#### Introduction

Enhancing the pedagogical competence of students with special educational needs is a crucial issue in the educational process, focusing on understanding their needs and providing the best support. Today, it is necessary to create equal opportunities for all students by developing inclusive education and creating unique pedagogical methods and strategies for each individual student.

Who are Students with Special Educational Needs?

Students with special educational needs are those who face difficulties in their physical, cognitive, or emotional development and require additional pedagogical support or an adapted educational environment. These needs can stem from physical or mental disabilities, special didactic needs, or learning limitations, such as reading difficulties or hearing and visual impairments.

**Enhancing Pedagogical Competence** 

- 1. Individual Approach: Individualization plays a key role in the pedagogical approach for students with special educational needs. Teaching methods should be adapted for each student, focusing on developing their unique abilities and ensuring their success. This includes providing teaching materials that align with the student's specific needs and engaging in one-on-one communication with them.
- 2. Differential Education: Differential education takes into account the differences among students. When teaching difficult topics to students with special needs, an individualized learning plan should be created, taking into consideration their learning speed, styles, and methods. For example, students who prefer visual learning may benefit from graphics and images, while those with hearing impairments may require audio aids.
- 3. Use of Technology: Technological tools play an important role in the education of students with special needs. Computers, digital content prepared by the teacher, interactive programs, and mobile applications can make the learning process more



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accessible. For instance, speech-to-text software or tools that assist in understanding educational materials using computers can be helpful for students with disabilities.

- 4. Social and Emotional Support: The success of students with special needs often depends on their social and emotional well-being. Therefore, teachers should support students not only academically but also emotionally and socially. Activities aimed at reducing stress, developing social skills, and boosting self-esteem are essential.
- 5. Teacher Training: It is crucial to organize special training courses for teachers to improve their approach to students with special needs. These courses should introduce new inclusive education methods, help teachers assess students' needs correctly, and develop pedagogical strategies that suit their individual characteristics.
- 6. Collaboration with Parents: Collaboration with parents plays an essential role in the successful education of students with special needs. Parents are often the best source of information about their children and can assist teachers by supporting their children's learning at home and providing insights into their needs.

#### **Conclusion**

To enhance the pedagogical competence of students with special needs, a comprehensive approach and strategies should be implemented. These include individualization, use of technological tools, differential education, and cooperation with parents. All participants in the educational process, including teachers, parents, and social services, must contribute to the successful realization of this process. By doing so, equal opportunities can be created for all students to fully realize their potential. Increasing the pedagogical competence of students with special needs is a key factor in ensuring the effectiveness of the educational process and in fully realizing each student's potential. Their success in education requires not only academic knowledge but also social and emotional support. Teachers, parents, and society must work together to provide unique pedagogical approaches for students with special needs. This, in turn, contributes to the development of an inclusive education system and provides every student with the opportunity to reach their highest potential.

Thus, applying strategies such as individual approaches, differential education, use of technological tools, and emotional and social support significantly improves the quality of education. Teachers should update their knowledge and diversify methodologies to create equal opportunities for all students. This creates the necessary conditions for students with special needs to become successful, self-confident, and active members of society.

Ultimately, the effectiveness and inclusiveness of the education system not only ensures that students with special needs have the opportunity to learn in transformative ways but also contributes to creating stability and equality in society. This, in turn, serves the development and well-being of the broader society.

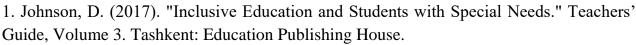


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#### **REFERENCES:**



- 2. Qodirova, M. (2020). "Pedagogical Support for Students with Special Needs." Individual Approach in the Educational Process. Tashkent: Innovation and Education Institute Publishing.
- 3. Kamalov, A. (2018). "Inclusive Education and Methodology." Ministry of Education of the Republic of Uzbekistan, Education Development Center.
- 4. Sultonova, G. (2021). "Role of Special Needs Students in Education and Pedagogical Support." Research in Pedagogical Sciences. Tashkent: Teachers' Publishing House.
- 5. Berg, C. (2019). "Differential Education and Inclusive Education Methods." Journal of Pedagogical Research, 7(2), 45-58.
- 6. Yuldasheva, N. (2022). "Role of Technology for Students with Special Needs." Pedagogical Technologies: Research and Practice. Tashkent: Education Publishing House.
- 7. Davronov, S. (2020). "Impact of Collaboration Between Parents and Teachers on the Educational Process." Pedagogical Scientific Research, 12(1), 74-86.
- 8. Alimov, A., & Nizomov, Sh. (2017). "Inclusive Education: Conceptual Approaches and Methodologies." Innovations and Effectiveness in Education. Tashkent: Nizom Publishing House.
- 9. Zakirjonov, M. (2019). "Pedagogical Methods and Approaches for Students with Special Needs." Pedagogical Technologies and Educational Methods, 5(2), 23-35.
- 10. Akhmedov, R. (2018). "Differential Education and Individual Approaches for Students with Special Needs." Education and Development Journal, 4(1), 98-112.
- 11. Shamsiev, R., & Islomov, B. (2020). "Challenges and Solutions for Students with Special Needs." Pedagogy and Psychology, 8(3), 75-89.
- 12. Mustafaev, J. (2021). "Inclusive Education Methodology for Teachers." Education Academy of Uzbekistan, Volume 2.
- 13. Mamatov, A. (2022). "Pedagogical Approaches and Strategies for Supporting Students with Special Needs." Innovations and Practice in Education, 9(1), 45-59.
- 14. G'ulomova, D. (2020). "Collaboration with Parents in Inclusive Education." Journal of Pedagogical Research, 11(4), 112-125.
- 15. Rahimov, F. (2018). "Technological Support for Students with Special Needs: Methods and Tools." Innovative Education, 6(2), 14-29.
- 16. Djumaniyazov, N. (2021). "Core Principles and Methodological Approaches of Inclusive Education." New Methods in Education, 4(1), 67-80.
- 17. Toshpulatov, A. (2019). "Supporting Emotional Development of Students with Special Needs." Pedagogy and Educational Methods, 7(2), 56-70.

