

THE ROLE OF INFORMATION TECHNOLOGIES IN INCLUSIVE EDUCATION

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Abstract:

Inclusive education serves as an important tool in ensuring the integration of children with disabilities into society. With the help of information technologies, it is possible to adapt the educational process, teach on the basis of an individual approach, and effectively use educational resources. This article analyzes the methods of using information technologies in inclusive education and their effectiveness.

Keywords: Inclusive education, information technologies, special needs, adapted teaching, digital resources, interactive platforms.

Introduction

Inclusive education is an important component of the modern education system, aimed at creating equal opportunities for all children, including children with disabilities or special needs. This education model serves to ensure that every person in society has equal rights. Inclusive education plays an important role not only in the educational process, but also in the socialization and integration of children into society. Information technologies are one of the main tools in increasing the efficiency of this process, ensuring wide use of educational resources and an individual approach.

Today, information technologies are making revolutionary changes in the educational process. Electronic textbooks, virtual classrooms, online learning platforms and other innovative technologies are expanding educational opportunities. In the field of inclusive education, information technologies allow creating individual curricula, developing programs tailored to the abilities and needs of children, and involving them in active participation in the educational process. For example, subtitles or audio translation programs are important for children with hearing impairments, and text-to-speech technologies are important for children with visual impairments.

A number of state programs and legislative frameworks have been adopted in Uzbekistan to develop inclusive education. This process aims to expand educational opportunities for children with disabilities through the effective use of information technologies. In particular, schools and academic lyceums in our republic are being equipped with modern technologies, and special programs are being developed for children in need of inclusive education.

The importance of information technologies in inclusive education is not limited to technical means. This process is important for children's socialization, rapprochement with their peers, and active participation in the educational process. With the help of information technologies, students can participate in various interactive activities, demonstrate their abilities, and acquire new knowledge. At the same time, the opportunities for distance learning through online learning platforms are expanding, which helps to eliminate any obstacles to education.



It is worth noting that the use of information technologies in the process of inclusive education also depends on the qualifications and experience of teachers. Teachers should be trained to effectively communicate with students using information technologies, provide them with knowledge based on an individual approach, and organize the educational process using various pedagogical methods. This will make the process of inclusive education more effective and meaningful.

In conclusion, information technology is becoming an integral part of inclusive education. It serves to enhance the quality and efficiency of education by enriching the educational process, increasing student interest, and providing them with modern educational opportunities. Through the effective use of information technology, we not only create equal opportunities for all children, but also ensure their full integration into society.

Inclusive education is a form of education that guarantees the right of every child to education, aimed at creating equal opportunities, taking into account their needs and abilities. This educational model ensures that children with disabilities or special needs study without being separated from their peers. This process is significantly facilitated by information technologies. Information technologies have become an integral part of inclusive education, and they play an important role in creating a comfortable learning environment for children.

The main role of information technologies in inclusive education

Information technologies allow you to adapt the educational process and provide an individual approach. While creating equal opportunities for all students, technologies allow children with disabilities to participate in classes and actively participate through special means. For example, audio and visual materials are provided for students with hearing impairments, and screen reading programs are provided for those with visual impairments.

Electronic whiteboards, interactive visual materials and special programs can increase students' interest in the lesson and organize the educational process more effectively. For example, interactive educational platforms allow children to learn independently and allow them to develop customized curricula.

Customized educational materials and programs

In inclusive education, special educational programs and customized materials are developed based on information technologies. These materials are prepared taking into account the needs and abilities of children. For example, for children with dyslexia or autism, texts can be enlarged and enriched with colorful graphics.

O'zbekiston ta'lim tizimida ham inklyuziv ta'limni rivojlantirish maqsadida axborot texnologiyalari keng joriy etilmoqda. Xususan, umumta'lim maktablari, akademik litsey va kollejlarda zamonaviy kompyuter sinflari, internet tarmog'iga ulangan maxsus o'quv xonalari bilan jihozlanmoqda. Bu o'quvchilarga masofadan turib bilim olish imkoniyatini taqdim etadi.

The role of information technologies in social integration

In inclusive education, information technologies are of great importance not only in the process of providing knowledge, but also in the process of socialization of children. Children with special needs can communicate with their peers via the Internet, participate in various interactive games, and be active in social life. This increases their self-confidence and facilitates their adaptation to society.

Through virtual classrooms and online platforms, students have the opportunity to work on



projects with their peers. This serves to develop teamwork skills, strengthen communication and cooperation skills.

The role of teachers and the competence of using technology

The effective use of information technologies in the process of inclusive education also depends on the competence of teachers. Educators must organize the educational process using information technologies, correctly assess the capabilities of each child based on an individual approach, and select appropriate programs for them. In this regard, it is necessary to organize regular training and advanced training courses for teachers.

Teachers play a leading role in creating comfortable conditions for children with disabilities in the classroom, increasing their interest and involvement in the educational process. Therefore, improving the technological literacy of teachers is of great importance for the further development of inclusive education.

Practical examples and international experience

A number of successful projects are being implemented around the world on the use of information technologies in the field of inclusive education. For example, in Scandinavian countries, adapted educational resources for children with disabilities have been developed using special programs and platforms. In the USA and Great Britain, virtual laboratories and electronic textbooks are widely used for children with dyslexia, autism and other special needs.

International experience in the development of inclusive education is also being studied in Uzbekistan and implemented in the national education system. In this process, cooperation between government organizations and the non-governmental sector has been established.

Inclusive education is one of the basic principles of modern society, guaranteeing the right to equal education for all children, regardless of their physical and intellectual abilities. This educational model serves to ensure the full integration of each student into society, taking into account their capabilities. Information technologies play an important role in accelerating this process, increasing its efficiency and creating a flexible learning environment for all students.

Today, with the help of information technologies, children with special needs can actively participate in the educational process, receive knowledge based on individual educational programs and realize their abilities. An approach tailored to the needs of students is provided through electronic textbooks, interactive educational platforms and distance learning programs. This plays a significant role not only in the educational process, but also in their social development.

The use of information technologies in inclusive education establishes close communication between teachers and students in the educational process, increases students' interest and provides them with the opportunity to acquire independent knowledge. For example, programs that read texts aloud, interactive whiteboards and audiovisual materials greatly facilitate the learning process for children with special needs. Such technologies ensure that the child receives education in accordance with his individual abilities and stimulate their development.

It should be noted that the role of teachers in the inclusive education process is very large. The effective use of technologies depends on the qualifications of teachers. Teachers must have the skills to use modern technologies and know how to work with children with special needs on the basis of an individual approach. Therefore, improving the skills of teachers, organizing special training and seminars for them is an integral part of the development of inclusive education.



In addition, efforts by the state and society to develop inclusive education should be further strengthened. Creating the technical base necessary for the widespread introduction of information technologies, providing schools and educational institutions with modern equipment, and developing special programs and educational materials remain priorities. At the same time, the adoption of international experience and innovative technologies for the development of inclusive education is also of great importance.

If we look at international experience, in many developed countries, inclusive education and information technologies are operating in harmony with each other. For example, in the Scandinavian countries, special programs for children with disabilities, robotic aids and virtual educational platforms are widely used. In the USA, Great Britain and Germany, a system of creating individual educational plans in educational institutions and providing children with special technological tools for their active participation in the educational process has been widely established.

Uzbekistan is also taking important steps towards the development of inclusive education. Within the framework of the resolutions of the President of the Republic of Uzbekistan on the development of inclusive education and state programs, work is being carried out to provide educational institutions with modern technologies and create a comfortable learning environment for children with special needs. At the same time, inclusive education centers are being established in different regions of the republic, and efforts are being made to expand the participation of children in the educational process.

In conclusion, information technologies are one of the most important tools in the development of inclusive education, which provides children with equal access to education and helps them find their place in society. Through the correct and effective use of technologies, inclusive education can be more qualitative, convenient and viable. This is of great importance not only for children, but also for their parents and teachers.

The combination of inclusive education and information technologies not only serves the education of children with disabilities, but also creates the basis for the humane and just development of society as a whole. Therefore, it is necessary to constantly develop this direction and make full use of technological opportunities.

REFERENCES:

1. Ernazarova, Z. (2024). Gospital pedagogikaning mohiyati. PEDAGOG, 7-12, 1-4.
2. Ernazarova, Z. (2024). O'zbekistonda inklyuziv ta'limning istiqbollari. Inclusive Education, 1(5), 15-20.
3. Kuranboyeva, O. (2024). O'zbekistonda inklyuziv ta'limda axborot texnologiyalarining o'rni va istiqbollari. PEDAGOG, 7(12), 127-131.
4. Kuranboyeva, O. (2024). Inklyuziv ta'limda axborot texnologiyalarining o'rni. Inclusive Education, 1(2), 75-80.
5. Masharipov, V. A. (2024). Maktab kimyo fanida suv mavzusini barqaror taraqqiyot tushunchalari bilan uyg'unlikda o'qitish. Экономика и социум, (4-2 (119)), 291-293.
6. Masharipov, V. (2023). Umum ta'lim maktablarida kimyoni fizika fani bilan bog'lab o'qitishning ahamiyati. Экономика и социум, (11 (114)-2), 237-240.



7. Mirzarakhimova, G. I. (2024). ACT dynamics of teenagers with speech impediment. Web of Teachers: Inderscience Research, 2(12), 228-231.
8. Mirzarakhimova, G. (2023). Dynamics of intelligence of low-speech in adolescents. Science and innovation, 2(B3), 84-87.
9. Жураев, С. М. (2023). Шахс структураси ва мотивацион соҳа ривожланишининг психологик хусусиятлари. образование наука и инновационные идеи в мире, 15(5), 65-68.
10. Махсудова, М. А., & Жўраев, С. М. (2021). Замонавий шахс моделини яратишда шарқ алломалари қарашларининг аҳамияти. Central Asian Research Journal for Interdisciplinary Studies (CARJIS), 1(Special issue), 351-354.
11. Boydavlatov, Azamat (2023). Abu Ali Ibn Sinoning pedagogik qarashlari yordamida komil inson shaxsini shakllantirish. Ta'lim va taraqqiyot, 1(1), 288-293.
12. Omonovich, K. D., & Mirzaahmadovna, M. S. (2023). The Relevance of the Dual Learning Model for Our Country. Telematique, 22(01), 265-274.
13. Mirzarakhmonova, S. (2023). Dual professional competence as a dual content theoretical foundations of vocational education system development. Science and innovation, 2(B5), 264-270.
14. Ахмедов, Б. А. (2023). Таълим жараёнида масофавий таълим муаммолари ва ечимлари. PEDAGOG, 6(1), 93-97.
15. Ахмедов, Б. (2018). Oliy ta'lim muassasalarida chet tili o'rganish jarayonida elektron ta'lim kurslarini qo'llash tamoyillari. Toshkent davlat pedagogika universiteti, 1(1), 51-56.
16. Akhmedov, B. A. (2022). Using of Information Teaching Technologies in the Teaching Physics in Higher Education. NeuroQuantology, 10(10), 524-536.
17. Akhmedov, B. A., & Jakhongirova, Y. J. (2022). Translating culture-specific concepts. Uzbek Scholar Journal, 10, 161-165.
18. Ахмедов, Б. А. (2023). Интеграллашган таълимда талабалар билимларини виртуал тест назорат қилиш тизимларини ишлаб чиқиш концепцияси. PEDAGOG, 6(1), 86-92.
19. Akhmedov, B. A., & Jakhongirova, Y. J. (2022). Methodology of teaching english: approach of national way. Uzbek Scholar Journal, 10, 218-224.
20. Akhmedov, B. A. (2022). Psychological and pedagogical possibilities of forming tolerance in future teachers. Uzbek Scholar Journal, 11, 289-295.
21. Ахмедов, Б. А. (2022). Повышение питательности завтрака с помощью биодобавок для укрепления здоровья студентов. Uzbek Scholar Journal, 11, 7-11.
22. Akhmedov, B. A. (2023). Methods to increase algorithmic thinking in primary education. Uzbek Scholar Journal, 12, 22-26.
23. Ахмедов, Б. А. (2021). Таълимда ахборот технологиялари фанининг модуллари ўқитишда кластерли-инновацион технологиялардан фойдаланиш тамойиллари. O'zbekiston respublikasi oliy va o'rta maxsus ta'lim vazirligi, 441(15), 18-21.

