



THE ADVANTAGES OF IMPLEMENTING INCLUSIVE EDUCATION BASED ON DIGITAL TECHNOLOGIES

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Abstract. *This article explores the importance of digital technologies in the implementation of inclusive education for young people with disabilities.*

Keywords: *Inclusive education, information and communication technologies, children with disabilities, digital video, multimedia programs.*

Introduction. Currently, the use of information technology and telecommunications in inclusive education is becoming increasingly widespread. It is difficult to overstate the role of digitalization in inclusive education. Inclusive education equalizes the rights of ordinary children and children with disabilities, and thereby lays the foundation for a just society in which everyone has the right to equal and full education, regardless of their individual characteristics and physical capabilities. In the context of challenges, modern information and communication technologies come to the rescue, serving as a powerful tool for assistance and support in the educational process for children with disabilities. This topic is a key challenge for all educational institutions in the world today, as there is no well-developed mechanism to be taken as a basis for a correct and validated mechanism of inclusive education. In a digital society, information and communication technologies allow us to conduct experiments, which in turn helps the birth and development of new methods and mechanisms of inclusive education.

Literature Analysis and Methods. There are different definitions of the term "ICT" in the world. Many people associate ICT with complex, modern, and expensive computer technologies, whereas ICT also includes technologies that we use in our daily lives, such as television, radio, telegraph, and telephone.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) gives the following definition of this term: "ICTs are tools and processes for accessing, processing, removing, organizing, storing, presenting, producing, and exchanging information using automated electronic means." These can include software, hardware, and telecommunications such as computers, printers, scanners, faxes, digital cameras, modems, recording devices and players for CDs and DVDs, multimedia programs, digital video, radio, television broadcasts, and more.

Today, ICT is used in all levels of education, from kindergarten to higher education, and in various forms of education (special education, mass education, inclusive education, distance or online education).



Many scholars, including L.T. Zembatova and S.R. Khablieva, as a result of their studies of educational activities, emphasize that ICT in education changes the role of teachers from "sages on the stage" to "guides on the side," while the role of learners becomes more active and collaborative. Due to its capabilities and convenience, ICT makes it possible to fill gaps in knowledge, increase the level and quality of education, provide new educational opportunities, and create favorable conditions for storing and accumulating knowledge.

ICT has proven itself as an indispensable tool for promoting international goals and objectives in the education system, which can be considered important for the "education for all" mission within the framework of sustainable development in modern society. UNESCO emphasizes the need to use ICT to support the goals of accessible education for all. ICT has great potential for effective education, disseminating information flows for knowledge acquisition, and designing effective mechanisms for educational services. ICT contributes to the stable dissemination and development of access mechanisms to educational materials, strengthens interaction between learners and with teachers, where emphasis is placed on both knowledge and the choice of actions and values.

ICT, as a tool to support personal access to knowledge and information, was adopted in the 1948 Universal Declaration of Human Rights, which recognizes the possibility of free access to information and its exchange as a fundamental human right. Articles 3 and 4 of the UN Convention on the Rights of Persons with Disabilities reiterate this: "Ensuring access to information for persons with disabilities," and Article 9 emphasizes the need for "designing, developing, producing and disseminating information and communication technologies and systems to ensure access," and Article 24 speaks of the right of persons with disabilities to education "without discrimination and on the basis of equal opportunities," which means that access to information is necessary for education.

In inclusive education, ICT is diverse and can provide various quality technologies to improve and support educational learning processes in inclusive learning environments, which includes widespread modern commercial technologies such as computers, laptops, netbooks, tablets and smartphones, various peripheral devices, mobile phones, electronic whiteboards, projectors, and others. Assistive technologies help learners to use basic technologies seamlessly, while assistive technologies help to support the education of learners with disabilities.

Discussion. Today, all technologies are closely interconnected, complementing each other's shortcomings with the strengths of others, thus further developing and helping to make inclusive education more effective through technologies or methods designed to provide access to information. They can be considered assistive technology approaches, because the approach is assistive, even if the technology is not necessarily so.

In organizing inclusive education, modern information systems and technologies provide us with advantages related to the possibility of remote interaction, which is of great interest in the context of the information society and digital transformations taking place in our society.





ICT, widely used in inclusive education, is divided into the following possible areas of application:

- Supporting personal access to information and knowledge for learners with disabilities – within this area, ICT is considered and used as a factor or tool to improve the quality of access to information and knowledge for learners with disabilities in formal and informal educational institutions;
- ICT is used in educational institutions for didactic and pedagogical purposes, to increase the level of personal development, improve the educational process and develop new skills, and as a tool to support the teaching of teachers;
- ICT is used to maintain interactive communication between participants in the educational process, to assist learners and teachers in mutual consultation;
- ICT is used to interact with the administrative part of the organization, eliminating barriers between learners and the organization's management.


ICT used to support teaching and learning can be considered the most widespread and applicable in education. Many forms of ICT can be easily used to create demonstration presentations, various exercises, video and audio conferences, and to establish broad interaction through text chats and bots. The use of ICT gives children with disabilities confidence, as they can present themselves as ordinary, healthy people in the virtual world, because many forms of disability are not visible on camera when a person is sitting at a computer or tablet, or writing a message in a messenger. Today, there is a large scope of ICT with many strengths in adapting to the needs of learners with disabilities, which is of great benefit to learners with disabilities in education.

The use of ICT for each learner, depending on their situation, is effective in the context of communication and achievements in the learning process, as they can ask questions to their peers and teachers at any time. Today, ICT tools for inclusive education are constantly evolving, new opportunities are being created, and the various characteristics of learners with disabilities are being studied to increase the optimality and adaptability of the tools being developed.

The basic principle of inclusive education is to respect human rights in education. UNESCO emphasizes that all learners are equal in their right to education, regardless of their mental and physical characteristics. Within this principle, ICT is a key component in supporting inclusive education for learners with disabilities.

ICT has a positive impact on inclusive education, even though it is not an end in itself. ICT is considered an auxiliary tool for inclusive education. When inclusive education specialists and methodologists use modern computer technologies, the quality of their work increases, and the possibilities of interaction and remote interaction expand. Learners with disabilities can use ICT to bypass barriers related to their physical and mental abilities in the educational process. Despite all the advantages of ICT today, it is not fully used in inclusive education, and this is due to various factors: in some underdeveloped countries, these are





financial problems, while in developed countries, governments do not consider it necessary to spend the necessary funds on this.

The educational needs of learners with disabilities are greater than those of their healthy peers, because a good education gives them the opportunity to find a job and a good life partner in the future. It is difficult for learners with disabilities to participate in the educational process, because they need special conditions and special opportunities due to their functional limitations, so that they can study on an equal footing with healthy children and not feel discriminated against.

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