



PROSPECTS FOR THE IMPLEMENTATION OF INFORMATION SYSTEMS AND TECHNOLOGIES IN EDUCATION

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<p>Received: 31th March 2026 Accepted: 30th April, 2026</p>	<p>In this article, we propose integrating information technology into the learning environment. This will transform learning from group-based to student-centered and help foster engaging teacher-student interactions. Using email, teachers can see how each student is responding to their assignments. The article examines the prospects of implementing information systems and technologies in education as a key direction of modernizing the learning process. It emphasizes that the digitalization of the educational environment contributes to improving the quality of learning, individualizing educational trajectories, and expanding opportunities for distance and blended formats. Special attention is given to the role of information systems in managing educational institutions, organizing learning content, and ensuring effective communication among participants in the educational process. The conclusion highlights the necessity of a comprehensive approach to ICT implementation, which includes technical, methodological, and organizational support, as well as the development of digital competence among teachers and students.</p>
<p>Keywords: educational, information technology, learning, email, computer, education, technological advances, learning environment.</p>	

In the modern world, information technology is a very important factor. Every day, new devices with accompanying software appear on the IT market, aimed at solving various problems in different areas of human activity. In addition, it is important to note the significance of developing information systems and technologies in the field of education: the greater the technological achievements, the more advantages they provide to learners at all levels of education.

However, it should be noted that technology in education is a delicate topic in many countries. Many parents believe that information technology only harms their child in the learning process, while others hold the opposite view. We believe that technology is primarily intended to provide assistance, including to the learner. All students learn differently, and technology can help those who do not have the opportunity to attend school. Some students simply cannot study in an educational institution due to a number of problems, such as health conditions, difficult family circumstances, or other issues. In such cases, information technology in education plays a huge role. Information technology has many different aspects in the field of education, one of which is improving the level of student learning, which ultimately leads to obtaining quality education. It is important to note that modern information technologies, combined with various teaching methods, can enhance academic performance. Positive effects of such a synergy have been observed in all major subject areas—from preschool to higher education, including both mainstream and special groups of learners. It has been found that information technology in education has had a positive impact on learners' attitudes toward studying and on their independent understanding and analysis of material.

The introduction of information technology into the learning environment allows education to shift from group-based to student-centered, helping to stimulate greater interaction between teacher and student. Information technology has demonstrated a shift from an emphasis on memorization to problem-solving and applying knowledge. Thanks to the use of IT, learning opportunities are no longer limited by time or place, enabling lifelong learning and development. Learners are more inclined to use computers to seek help, since they can access them independently at any convenient time without relying on third parties. Information technology helps learners become independent.

It should also be noted that information technology in education helps solve communication problems. Students can use computers to gain knowledge in different sciences. There is email, instant messaging, and chat communication. A student can use these functions to continue their education. Students can receive messages from the educational institution they attend within minutes.

University students are required to have an email address so they can send information to their teachers. Email allows the teacher to use the reply function and make any comments or corrections to students' work. The teacher can also send assignments to all students by email, saving time otherwise spent printing paper copies.

Through email, the teacher can see how each learner responds to assignments. The advantage of this is that in a regular group, some students may be very shy, which prevents them from showing their true knowledge. Receiving assignments by email allows shy students to respond without worrying about what their classmates might think. This helps students become more open.

Information technology also helps people who want to continue their education but do not have such an opportunity, for example, due to geographical reasons. These individuals can study online. The advantage of such learning lies in its "freedom" from schedules and geography. In addition, the learning process is mainly based on a testing system, with tests automatically recorded and not subject to change during completion. As mentioned earlier, there is no fixed timetable; tests can be taken at any time of day. This works well and is suitable for busy people, because with such an organization of learning they are able to combine work and education, taking courses, for example, from home.

Of course, information found on the Internet is not always truthful or accurate. Learners must independently seek out the most reliable sources. Today, many major journals and newspapers are available online. This allows learners to access "verified" journals or newspapers remotely. Students no longer need to worry whether the library has the journal or newspaper they require; they can simply go online and view it in the archive. Likewise, collections of most major libraries can now be easily found on the Internet, so a student can check whether a particular book is available without traveling to the library in person.

Information technology can also allow learners to see places they have never visited, may never go to, and perhaps will never experience in person. Becoming familiar with such places helps at the very least to broaden their horizons.

Information technology has advanced to such a degree that it can also assist children who have not yet begun their formal schooling. There are a number of educational systems and video games for young children that help them acquire basic foundational knowledge.

Information technology is the foundation of the modern world, and it has become essential in every sphere of our lives—including, of course, education.

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