

## **THE USE OF CLOUD TECHNOLOGIES IN THE DISTANCE EDUCATION SYSTEM TO IMPROVE THE QUALITY OF THE EDUCATIONAL PROCESS**

Cloud technologies have become key tools in the digital transformation of education, which has undergone significant changes in the 21st century [2]. Universities, schools, and other educational institutions are increasingly integrating digital platforms into their programmes to ensure accessibility, efficiency, and adaptability in the educational process. However, despite the clear advantages, several serious challenges remain, requiring solutions.

The COVID-19 pandemic accelerated the transition to distance learning, making cloud technologies a convenient option and a mandatory component of modern education. Platforms such as Google Workspace for Education, Microsoft Teams, and Moodle offer various tools—from document editing to interactive feedback between teachers and students. These platforms create opportunities for individual and collaborative learning, essential for developing contemporary skills such as critical thinking, creativity, and collaboration [1].

However, introducing cloud technologies comes with several challenges, one of the most significant being data confidentiality and security. Educational institutions collect and process large amounts of information about students and teachers and the educational processes they are involved in. Unauthorised access to this data can have serious consequences, the most severe being harm to users and potential data loss. Additionally, dependence on commercial providers such as Google or Microsoft raises concerns about the system's long-term stability and could lead to monopolisation [2].

Furthermore, the digital divide remains a significant barrier. Many students, especially those in remote or economically disadvantaged regions, may lack access to high-speed internet and modern devices. This leads to inequality in the educational process, even within the same country. Educational institutions are working to reduce this divide by investing in infrastructure and providing technical support to disadvantaged students [2].

It is also essential to recognise the cultural aspects of using cloud technologies, which should be noticed. Digital tools directly impact teaching methodologies, shifting the focus from traditional passive learning to a more interactive, student-centred approach. For example, the gamification of learning, actively implemented through cloud platforms, can significantly boost student motivation. However, such a methodology requires careful planning to prevent students from adopting a superficial approach to learning [1].

Considering these issues, it is clear that cloud technologies have the potential to expand the horizons of education, but their implementation requires a strategic approach. Addressing data security concerns, bridging the digital divide, and understanding the cultural implications of digital tools are vital aspects that must be considered. Thus, the use of cloud technologies in education is not just a tool for modernisation but also a challenge that requires rethinking educational practices. If implemented correctly, cloud technologies can serve as the foundation for creating an accessible, inclusive, and effective educational system that meets the demands of the modern world.

### **Reference**

1. Reshaping Policies for Creativity: 2022 Report [Электронный ресурс] / UNESCO. – Режим доступа: <https://unesdoc.unesco.org/ark:/48223/pf0000382832> (дата звернення: 20.11.2024).
2. Global Education Monitoring Report 2022 [Электронный ресурс] / UNESCO. – Режим доступа: <https://unesdoc.unesco.org/ark:/48223/pf0000378847> (дата звернення: 20.11.2024).