APPLICATION OF CLOUD TECHNOLOGIES IN COMPUTER SCIENCE LESSONS

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Annotation. This article discusses the use of cloud technologies, as well as their effective use in computer science lessons. Cloud technologies use the capabilities of computer networks and information and communication technologies in their infrastructure.

Key words: information technologies, cloud technologies, web service, e-education.

When studying the basic course of Informatics and ICT, a large number of programs are considered and mastered. Most of them have analogues in the form of web-services, which are always available in any place, wherever the participant of the educational process is located, provided they have access to the Internet.

At present, no educational institution can work effectively without the use of modern information technologies.

Modern technologies allow you not to buy expensive software for installation on a computer, you can deploy a cloud infrastructure and have access to it from anywhere, from any equipment connected to the Internet. Cloud technologies use in their infrastructure the capabilities of computer networks and information and communication technologies, using which data exchange, storage actions and other operations are performed on the server side, not the user.

The use of cloud technologies allows expanding the scope of obtaining electronic education, taking into account the individual characteristics of the perception of the material by students and improving the teaching system as a whole. With this approach, education will become accessible to almost all students, the process of communication of all members of the educational environment will be simplified, and the level of savings on educational costs with technical equipment and educational materials will increase.

The introduction of cloud technologies in the educational process will increase the cognitive interest and activity of students during training, achieve high performance in academic disciplines and deepen students' knowledge in the field of modern information technologies. Education in the information educational environment using cloud technologies will provide an opportunity to organize the educational activities of students in accordance with modern requirements and taking into account the effectiveness of the use of innovative technologies in training.

The use of cloud computing in the educational process enables educational institutions to use computing resources and applications as a service via the Internet, which allows intensifying and improving the learning process, as well as improving its quality due to special functions that are unusual for traditional ICT technologies.

There are many public cloud services that allow you to work with office applications, but most of them are paid for by organizations that decide to use them to collaborate with their employees. Microsoft's cloud office service is called Office 365 [1]. Its main competitor is Google Docs. If you're collaborating on Google Docs, Sheets, and Slides, Google Drive lets you create, view, and co-edit files without copying and sharing documents.

Google's cloud service is called Google Drive. It includes document creation capabilities (Google Docs) and cloud storage (Gmail email, Google Translate auto-translator, Google Maps mapping service, Google Talk messenger). Google Drive lets you store files online and on your hard drive, and access them from anywhere, even on the go. Changes made to a file on the web, computer, or mobile phone are reflected on all devices that have Google Drive installed.

If you're collaborating on Google Docs, Sheets, and Slides, Google Drive lets you create, view, and co-edit files without copying and sharing documents.

The rapid spread of cloud technologies sets us the task of integrating cloud services into the system of an educational institution. Cloud computing has broad application prospects in the field of education, scientific research and applied development, as well as for distance learning.

Google services is a space for interested and productive education for students and teachers that does not violate the principles of equal chances for education for all, it is self-affirmation, disclosure of individual abilities, development of independence, responsibility, creativity, the ability to analyze and synthesize selected material, increasing interest in subject.

The use of cloud technologies increases the mobility of students who can access the reference and information systems of the university from any modern communication devices (desktop computers, laptops, netbooks, smartphones, tablet computers, cell phones with Internet access support, etc.), both from local (including wireless Wi-Fi networks) networks of the university, and using channels of the global Internet, which allows you to connect from virtually anywhere.

Thus, during the transition to new educational standards, cloud technologies help to form a new information culture for teachers and students, and provide a unique opportunity to combine project methodology and information and communication technologies.

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