



E Conference World

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IMPROVING DIGITAL COMPETENCE USING CLOUD TECHNOLOGIES

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In this research work, which was carried out in order to implement the tasks for the development of digital education in the order of the President of the Republic of Uzbekistan on the approval of the strategy “DIGITAL UZBEKISTAN - 2030” and measures for its effective implementation, the education system, including the development of digital competence, is of great importance by leveraging cloud technology and using it as a tool in preparing future teachers. Forming the readiness of future teachers to work in a virtual social educational environment based on the development of their digital competence is one of the important tasks. In the process of analyzing the professional and pedagogical activities of the future teacher in state educational standards and the areas of application of his digital competencies, it is necessary to determine their interdependence and opportunities for the development of digital competencies. Based on the development of digital competencies of future teachers, they are brought to successful and effective professional activities through cloud technologies.



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It is important to analyze the basic digital competencies of future teachers and develop their readiness to operate in a virtual social and educational environment using cloud technologies based on the development of digital competencies. Modern processes of digital transformation of education in the information society in the preparation of specialists who are ready and capable of effective professional activities in the modern virtual social and educational environment for the higher education system: managing the cloud platform, ensuring information security; explore the possibilities of using cloud computing technologies; introduction of cloud technologies; data storage and processing based on cloud computing; Creation of software for the implementation of various models for the provision of “Cloud” services; sets the task of developing new methods and technologies for using cloud technologies.

Media, social networks, government services, telemedicine and cloud technologies;

- digital competencies – the ability to search for information, use digital devices, social networks, make financial transactions and online purchases, create multimedia content;

- digital security – ensuring the protection of personal data, using strong passwords, legal content and data storage.

Mixed, remote, mobile, and cloud technologies are used as modern digital technologies of educational organizations. A future teacher's proficiency in digital technologies is determined by the presence of certain digital competencies. The components of its structure and content, teaching methods, forms and tools are proposed, aimed at developing the digital competencies of the future teacher using cloud technologies and their use in the educational process; The criteria for



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the formation of levels of digital competencies were formed as part of professional preparation for activities in a virtual socio-educational environment. According to the presented model, competence-based, scientific-methodological, systemic synergetic, information approaches, any competence is formed in stages, at a special level. The future teacher will use this competence to solve problems arising in practical activities, to demonstrate professional competence. Databases help the user when using cloud technologies. Databases are organized collections of data stored in collections, each containing a set of records. Database management systems (DBMS) provide the user with powerful tools for creating, updating and processing large volumes of complex data. There are three types of database structure (hierarchical, reactive and network). Among the databases used to develop WEB applications, the leader today is, of course, MySQL. Its main advantage is simplicity. As a result, it becomes necessary to precisely program the ground rules to maintain maximum SQL query speed and ensure data integrity and consistency at the application server level. Databases are used everywhere and, most importantly, in most projects in the world of web development. All database design options have a set of standard rules and best practices. They help keep your database organized and help it work with your site more intelligently and efficiently.

The database stores, organizes, and manages records, files, photos, messages, etc. General graphic conventions and standard visuals, diagrams, and pre-planning work required to create the database are completed. Most databases are relational. This means that the tables in the database are related to each other. For example, if there is a “user” on an online store website, he can certainly be associated with certain products based on his order information or display of desired products. In



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a blog database, authors must be linked to the posts they write and the comments left by authorized users.

Database normalization in cloud technologies is a set of virtual instructions designed to organize information storage more efficiently. This is a big topic, but already understanding the basics can help you a lot.

Database design in cloud technologies is an understanding of the correct database structure, planning, allowing the developer to obtain all the necessary information in advance and implement his plans.

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