

Advantages Of Using Mobile Applications In The Educational Process

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This article highlights the possibilities of using mobile applications by professors and teachers of higher education when preparing students for professional activities. Also today, there are online and offline software tools for creating mobile applications, and the study highlights the capabilities of programs such as Android Studio, Zoho Creator, Quixy, AppMySite, iBuildApp.

Keywords:

Mobile application, social network, information and communication technologies, platform, automation, distance education.

Introduction.

In the age of technology, distance learning has already become commonplace and has provided inexpensive ways and to information since the modern era of technology. Sharing information has now become an integral part of everyone's life, and devices such as phones, tablets and smartphones have become the mainstay of digital life. With the development of technology, it is observed that electronic devices are capable of performing increasingly complex tasks, as well processing more data streams.

Advances in technology require that the mobile devices and applications used by all parties are constantly updated up-to-date. and introduction modern of information technologies into the educational process using mobile devices significantly changes the environment continuing of education centers. If you pay attention, today's schoolchildren and students use their smartphones to work on various social networks (Facebook, Instagram, Telegram, TikTok, etc.), typing, checking email or making calls.

A social network is an online platform that allows people with similar interests to come together and share information, photos and videos. Accordingly, communication strategies of educational institutions are focused on the integration of mobile applications and traditional educational technologies into the educational process.

A mobile application is software designed for smartphones, tablets and other mobile devices and adapted for a specific platform (iOS, Android, Windows). Unlike web resources, it works without network access.

A brief analysis of the scientific works of other scientists on the topic.

In the article by N. Prokofieva and other foreign scientists "The use of mobile technologies in the educational process," many educational institutions Latvia use multimedia technologies and web resources to provide quick access to educational sites used in the educational process, and mobile technologies to organize communication between teachers and students. A study by Maria Graciela IANOs et al. entitled "Mobile learning (mobile learning) in the educational process" notes that as a result of the use of mobile devices for educational purposes, it is possible to increase students' interest in mastering subjects and provide access to educational sites using mobile devices for improving the learning process.

article Russian bv scientists Atroshchenko and others "Mobile applications and their use in the educational process" highlights the advantages of mobile education and the problems of their use, and also provides examples of practical application in teaching medicine, mathematics, and foreign languages. and other items. The scientific article by C.T. Doskajanov et al. entitled "The Role of Mobile Applications in the Education System" is aimed at analyzing the area of mobile applications in education system. In the dissertation of V. A. Kuklev on the topic "Formation of a system of mobile education in open distance education," the purpose of the research is the theoretical, methodological and technological justification of the process of mobile learning in open distance education as integral system, in which important, structural and functional features of mobile education are identified based interdisciplinary approach. It differs from other studies in that it is necessary to form a modern understanding of it, the concept of "Mobile textbook" is defined, leading trends, principles methods of mobile education are highlighted, and the pedagogical foundations of the mobile education system in open distance education are developed. Also, taking into account interdisciplinary and modular approaches, the interaction of teachers and students in the mobile learning environment in conditions. the methodological modern foundations of mobile education, its principles, methods and tools from a scientific and practical point of view have been developed.

The article by one of the scientists of our country, A. N. Orishov, "Mobile application technologies and principles of their use in the education system," provides analyzes of mobile applications, analyzes of mobile technologies, and analyzes of programs that create mobile applications. The scientific article by F.M. and M.M. Nafasov "Pedagogical foundations of using mobile applications in the educational process" examines the pedagogical aspects of the use of mobile applications in the educational process and highlights the classical components of the educational process, taking into account the fundamentals of professional and pedagogical activity. The article also talks about the pedagogical nature of the educational process organized using mobile applications, its stages and aspects.

Scientific novelty of the article.

In recent years, the development of computer technology has led to the automation of many areas of human activity, including higher education. Automation of educational processes with the help of computer programs has created the basis for maintaining databases of teachers, students and other higher education workers, providing electronic tables for full-time and part-time courses. creating electronic educational systems, creating models of laboratory work. . It is known that in higher educational institutions of our country there are full-time, correspondence and distance learning forms. In full-time education, the organization of interaction between the teacher and students consists of lectures held in the classroom. practical classes and laboratory classes. In the correspondence course, interaction between the teacher and students in the classroom occurs only 2 times a year - during classes, and the rest of the time they receive independent education. Also, during this interaction, as a rule, students are overloaded with information on the content of various subjects. In the form of distance learning, interaction between the teacher and students is carried out primarily through computer technology. In general, it is desirable to use educational content or mobile applications created by talented teachers in different subjects to effectively ensure selfdirected learning for students in all three forms of educational process.

Based on the above, in this article we will get acquainted with the types of mobile applications, online platforms and computer programs that create them, their functionality and requirements. All mobile applications are conventionally divided into types such as social networks (Facebook, Instagram, Telegram, etc.), entertaining gaming programs for children and adults, advertising programs and educational content services. Also, each mobile application created by a developer has its own advantages and disadvantages, which must be adapted to the requirements of the time.

Next, we will briefly introduce some online platforms and computer programs that create applications for devices running Android and IOS operating systems.

Android studio . This program was developed by Google in 2013 and is an integrated program that provides users with tools to create mobile applications on the Android operating system platform. Android Studio can be installed and used on Windows, Mac and Linux operating systems if you know the Java or S/C++ programming language. Also, the Android Studio program has the ability to create mobile applications for the latest version of the Android operating system, check the created application for errors, test all elements of the application using various gadgets and identify in advance all possible defects in its operation. and several other options.

Zoho the Creator. It is a low-code online platform that enables rapid development and online delivery of web and mobile applications. The user does not need to write endless program codes to create mobile applications; he only needs to know English and computer literacy. This online platform also provides artificial intelligence, JavaScript, cloud technologies, multilingual support, offline use of a mobile device, integration with payment systems and other capabilities in the process of creating mobile applications.

Quixie. It is a cloud-based mobile application development platform for Windows, Mac, Android and IOS systems. With this platform, users can create simple and complex enterprise-

grade applications that offer their business services and automate their processes. Users also have the opportunity to use ready-made templates offered by the platform and customize them as they visually transform their ideas into applications. This platform does not require the user to write programming language codes, but requires knowledge of English and computer literacy.

AppMySite . The AppMySite platform is an online platform that allows users to create their own enterprise-grade Android and IOS apps in minutes without coding and includes additional features (chat, email, QR scanner, etc.) offered by the program. Using the platform, the user can create applications for educational and business processes by designing, creating and deploying their information in a short time. Additionally, user-created apps can be downloaded online from Google Play and the Apple App Store.

iBuildApp . This platform is designed for developing applications for iPhone, Android and Tablet devices, offering users more than 1000 ready-made templates for developing applications by industry (education, healthcare, manufacturing and construction, retail, media, financial services, business).. Also preferably on the platform while application editing And update There's a possibility. It provides users with Google Maps applications, audio player and other features for content management based on integration with applications built using the platform.

As a result of a comparative study and analysis of programs for creating mobile applications, educational and regulatory documents, textbooks and educational literature, it was revealed that mobile applications created in various fields must be created on the basis of pedagogical, sociocultural, economic and technical requirements.

Pedagogical requirements. Pedagogical Requirements: The mobile application is based on educational theories, instructional design models, content quality, content clarity and comprehensiveness, learner support, and learner management accessibility.

Social and cultural requirements . Sociocultural demands include teacher and student use of social interaction techniques, conformity,

attitude, visibility and observability, privacy and intelligence, and exhibitionism.

Economic requirements. Economic requirements include various costs and tradeoffs associated with application development in terms of economic feasibility, cost-effectiveness, and level of service.

Technical requirements . In terms of technical requirements, the quality of the software should be based on the ISO/IEC 9126 standard. This standard reflects the functionality, reliability, usability, efficiency, maintainability and flexibility of the mobile application being developed.

It has been established that the use of educational mobile applications in the effective organization of the educational process by talented teachers and in stimulating independent learning of students, as well as in preparing them for professional activities, gives effective results.

Clear conclusions and suggestions.

The use of mobile applications by higher education teachers in the process of teaching subjects assigns the following tasks to teachers: searching, sorting systematizing and information necessary for science; preparing the text of lectures and visual presentations based on selected information; development and implementation of practical and laboratory tasks based on the text of lectures, interesting and career guidance; development and implementation of small programs to automate the solution of issues related to the development of professional skills

creation of additional video lessons that prepare students for future professional activities and their effective use in the educational process; development of control questions and tests in the field of natural sciences and placement of them in a mobile application for monitoring and assessing the knowledge acquired by students. *And to the students:*

of students;

timely downloading of a mobile application developed by talented teachers; familiarization with the information included in the mobile application outside of class; study assignments given in class outside of class hours and actively participate in lessons;

Learn and develop your knowledge, skills and abilities by watching mini-programs and video lessons developed by talented teachers.

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