

## POSSIBILITIES AND FACTORS OF USING MOBILE APPLICATIONS IN MODERN EDUCATIONAL PROCESS

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**Abstract.** *The introduction of interactive tools into the educational process increases the quality of education and forms students' interest in science. The purpose of this article is to highlight the possibilities of providing students with educational information resources, knowledge consolidation and analysis, as well as the advantages and effectiveness of using mobile applications in the educational process.*

**Keywords:** *principles of modern education, mobile technologies, mobile applications, types of mobile applications, advantages, possibilities, effectiveness.*

The adoption of the Law “On Education” and the “National Program of Personnel Training” was the beginning of a large-scale reform of the education system in the Republic of Uzbekistan [1]. Currently, information and communication technologies (ICT) are rapidly entering the educational process, and it remains one of the most favorable factors in increasing the effectiveness of education.

Today, the development of Internet technologies has a positive effect on all spheres, including the sphere of education. These technologies are effectively used not only in the process of transmitting and receiving information, but also in the organization and management of the education and training process. This is the only goal of the educational and educational reforms implemented in our republic based on the "Strategy of Actions on the Five Priority Areas of Development of Uzbekistan in 2017-2021" - education and training of a well-rounded person and a qualified specialist. full implementation of the goal is provided on the basis of continuous education system reformation, updating its content in accordance with social requirements.

One of the important factors in the implementation of this task in the conditions of constantly changing social and professional conditions of pedagogical activity in the education and training system is the use of information and communication technologies, including mobile technologies [3].

Currently, the formation of the level of knowledge and intellectual potential of students is directly related to the strengthening of the material and technical and modern information technology base of educational institutions, the creation of high-quality educational literature, textbooks, electronic study guides and lecture texts, electronic The opportunities for implementation through the effective use of new information technologies, including mobile technologies, are expanding in the improvement of the educational system, which is closely related to the establishment of libraries [3].

Bringing the education system up to world standards is one of the important tasks of this reform. A characteristic feature of modern education in the world is the informatization of education and the training of personnel taking into account the needs of the information society. The state policy in the field of informatization in the educational system of the Republic of Uzbekistan "is aimed at creating a national information system taking into account the modern

global principles of development and improvement of information resources, information technologies and information systems" [2].

Information technology plays an important role in many areas of our life, so students in general schools begin to learn it in elementary grades. The use of various modern technologies, which increase the quality of education and increase the interest in learning, is one of the most important topics for studying information technology.

Today, the introduction of mobile technologies into the educational process makes it possible to solve educational problems to a certain extent.

A mobile application is a program installed on a specific platform that allows you to perform various actions. Mobile applications mean specially created programs for mobile phones, smartphones, communicators, tablet computers, etc.

Mobile applications are developed with a specific platform in mind, such as IOS, Android, Windows Phone. Therefore, an important aspect of using mobile applications in the educational process is its availability on various platforms [4].

The main purpose of introducing mobile technologies in the educational process:

- increase the quality of education;
- introduction and support of integration of communication technologies in education;
- increase the effectiveness of learning materials by students;
- introduction of formative assessment (analysis of own mistakes, self-assessment) and differentiated educational technologies into the educational process;
- formation of standardized tests and increase of teaching indicators;
- creating opportunities for students to receive continuous education. availability;
- Establishing and developing the relationship “educational institution - family - educational institution”.

The importance of mobile applications in the educational process is increasing not only due to their general availability and attractiveness in terms of new technologies, but also due to the following opportunities they provide:

- implementation of unified control over the level of knowledge of students;
- simplification of tests and tests;
- acceleration of information exchange between all participants of the educational process;
- simplifying the process of interaction between teachers and students;
- acceleration and modernization of the educational process;
- organization of a distributed educational resource;
- ensuring the joint activity of students without indicating the location of the participants of the educational process;
- use of the mobile application as a personal media library of educational, methodological and reference materials;
- connecting the mobile application to applications and applications in the network of the educational institution for educational and scientific purposes;
- use of mobile applications and embedded sensors to collect environmental data for educational and research purposes.

The introduction of mobile applications into the educational process increases the efficiency of the organization of the lesson process and the presentation of materials, frees the teacher from routine work and facilitates feedback forms [4].

Based on the results of UNESCO research, the following advantages of using mobile applications in the educational process have been identified [6]:

**Individual approach to education.** Mobile applications allow the student to choose the level of difficulty, or often the system conducts tests and automatically determines the level of knowledge of the user.

Implementation of feedback and evaluation of learning outcomes. Mobile technologies accelerate the process of assessment of learning outcomes and allow students and teachers to monitor the process. It helps to instantly identify and eliminate educational problems and improve the quality of education.

**Mobility of learning (anywhere and anytime).** It is convenient for students to carry their mobile devices with them, so they have the opportunity to conduct training at their own time.

Effective use of time in class. With the help of mobile technologies that record the result of the task, time is saved in the classroom, and teachers can organize the educational process more efficiently.

Formation of new communication groups. Mobile applications can form groups in the classroom based on students' interests, for example, students can express their opinions about the books they have read or ask questions they do not understand.

**Support for situational learning.** Compared to the traditional way of teaching, mobile applications have the ability to bring students to any environment, visualize and facilitate the understanding of the material.

The classification of mobile applications used in education is given according to their content and functional characteristics, and the main criterion for their selection should be reliability. Before using mobile technologies in the educational system or presenting them to students, the teacher must clearly understand how to integrate various mobile applications into the educational process.

According to K. Shipman, there are different types of mobile applications used in education[3]:

- content applications (content applications) that can add new information to the presented one;
- practical applications that help students collect and store information (field work applications);
- audio and visual applications (audio and visual applications), where students can listen to other people's speech or record themselves; mapping applications that provide students with information about maps and places;
- creative applications where students can create their own drawings to add information or enhance their work.

The use of mobile applications in the educational system serves to solve the following educational tasks:

- transfer of administrative information to students (schedule, tuition fees, etc.);
- personal media library of electronic educational resources, working with educational resources (textbooks, reference books, dictionaries, audiovisual information);
- organization of trainings using educational programs, search engines and Internet resources, collective interaction of students and teachers, additional services (global positioning system, etc.);

- giving advice, exchanging and transferring information;
- organization of webinars and use of social networks;
- testing and process monitoring.

In the educational system, mobile applications work in real time and provide modern information materials. On the one hand, it is individual, and on the other hand, it is based on cooperation, creating learning communities. Thus, when using mobile applications, a high level of socialization of students, the development of communicative competences and the ability to work in a team is achieved.

The main advantages of using mobile applications in the educational system are as follows:

- interactive interface;
- convenient library of educational materials;
- quick access to selected materials;
- view courses offline.

The main factors of increasing the main effectiveness of using mobile technologies in the educational process include:

- providing education and training to students based on modern technologies;
- teaching information collection, storage, processing and transmission;
- teaching students to think independently;
- formation and acquisition of knowledge, skills, qualifications;
- application and improvement of various technologies and methods;
- monitoring and analysis, that is, taking into account the student's level of preparation and interests.

This, in turn, can be achieved effectively only by providing full access to the Internet in educational institutions.

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