



THE EFFECTIVENESS OF THE USE OF MOBILE TECHNOLOGIES IN THE EDUCATIONAL PROCESS

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ABSTRACT

In this article, the foreign experience of using mobile technologies in the educational process, the need for it in our country and its effect in increasing the knowledge of students, problems of application of mobile technologies to the educational process, solutions and conclusions are presented, the advantages of using mobile education in modern education are discussed. Currently, despite the widespread use of mobile phones among students, mobile education is less common in local higher education institutions. In the educational process, the technical and psychological preparation of teachers and students for the use of mobile technologies, as well as the need to consider new opportunities for more effective use of mobile learning opportunities will be analyzed.

KEYWORDS: *Mobile education, technology, didactics, interactive, teaching method, Mobiledu, electronic textbook, gadgets, individual, competence, communication.*

INTRODUCTION

Today, mobile technology has become an integral part of our lives. They allow us to significantly save our time and transfer data more easily and quickly. Although the advantages of using mobile technologies in everyday life are almost certain, the issue of their implementation in the educational process remains open. It is not an exaggeration to say that the introduction of mobile technologies into the educational process is at the beginning of its development.

The term "Mobile learning" (m-learning) refers to the use of mobile and portable IT devices in the learning process, such as PDAs (Personal Digital Assistants), mobile phones, laptops, and tablets. Since computers and the Internet have become indispensable educational tools, these technologies are more portable, affordable, efficient, and easy to use, which opens the door to new opportunities for ICT, in particular, to expand opportunities for participation and use on the Internet. Mobile devices such as phones and PDAs are much cheaper than computers, and therefore it represents a cheaper way to access the Internet, which is one of the main tools for organizing Independent Education. [1]

The concept of M-learning was used by Alan Kay in the 1970s. Although by the 1994 years smartphones were created and used as personal communicators, since then, technological companies have begun to develop devices that are much more sympathetic and functional even in terms of design, known as "smartphones". The creation of the smartphone provided a platform for mobile education, and the innovative movement of mobile devices brought mobile education to the status of a project and research.

MATERIALS AND METHODS

The first (and most common) way is to use a mobile phone as a means of accessing a global network. It is possible to organize access to specialized sites with electronic training courses, tests, practical classes, and additional educational materials (photos, photos, voice, and video files). It is also possible to exchange information via e-mail and instant messaging in ICQ, QIPs, their versions are also available for mobile phones. Thus, at all stages of teaching, the audience will be able to find information materials and also have many opportunities that will help them to monitor the entire learning process and solve problems.



The M-Ubuntu Project, developed in the second half of 2007 by Sweden's largest educational academy Worldwide, is an example of the use of mobile phones. Within the framework of this project, a distance learning platform was presented. This will allow you to create all the conditions for acquiring new knowledge and actively use the latest information technologies, even in remote regions and third countries. The M-Ubuntu programmers paid special attention to training with the use of mobile phones, and this system was developed not only for the use of students but also for applications for the improvement of qualifications for teachers, as well as for the development of test and control programs for students. Using the M-Ubuntu platform, any teacher has the opportunity to get advice from professors from large universities.

The second way to use mobile phones for training is to use special programs for mobile phone platforms that are capable of opening and viewing Office program files such as Office Word, Powerpoint, Excel. When you have such files, where there is training data in the memory of the mobile phone, they can be viewed with a convenient scroll bar, suitable shrift and a convenient interface, adapted for screen versions.

Besides, the data source video and audio files, which are available on every phone in recent years, the player software can serve as an additional option. This opportunity is especially important for those who want to learn foreign languages.

The successful application of this method of teaching can be exemplified by several educational programs in Japanese and Chinese universities. Taking into account mobile technologies, the teachers of these universities consider them very promising in the conditions of informatization of modern society. The National Cyber Institute of Japan, specializing in distance learning through the Internet, in the 2008 year proposed an innovative system of teaching using a mobile phone that allows you to learn any discipline-both at home and in a cafe and the subway. If during the lesson the text of the lecture on the computer and all the necessary pictures are displayed in the middle of the screen, and the lecture itself is transmitted in the video corner, then the mobile version is based on streaming video technology, and all the text and pictures are additionally downloaded. Students are offered to study about 100 different topics, including ancient Chinese culture, journalism and English literature.

In China, Nokia is developing a Mobiledu application, which began in the 2007 year and includes English-language teaching materials and other educational content, from many online data suppliers directly to mobile phones. You can access

this information through Nokia mobile phones or the application website. During the activities of the Mobiledu program, more than 20 million people have already become its subscriber.[2]

Another way to use mobile phones for the study is to use specialized electronic textbooks and courses that are adapted to the viewing and operation of students' mobile phones. Students are offered to download Java programs on their phones, for example, tests on certain subjects, as well as the information necessary for their successful implementation (electronic textbooks, lecture texts). Modern technologies make it sufficiently easy to design and programmatically implement such electronic manuals. The ability to place diagrams, drawings, and formulas make writing e-learning courses for mobile phones Univer practical and applicable to any subject under study. It is also possible to carry out educational programs using the capabilities of telephone graphics in gaming programs, but the implementation of such programs is a rather complex and time-consuming process. As a result, writing science test programs for electronic textbooks and mobile phones seem to be a more promising direction. There are many special programs for calculators of different complexity (simple, scientific), Office programs for cell phones, applications that include various tests (for example, for psychologists), etc.

For example:

Compared to Duolingo, it is the best language learning platform in the world. Duolingo uses the mechanics of the game: the lessons are organized at a high level, to move to the next, you need to move to the previous part in full or in part. For daily visits, the user is given experience and a variety of Pleasant virtual bonuses.

Netology is an online university for online professions. Training is conducted in the form of a webinar, which can then be downloaded and re-listened to. In the end, a certificate of termination is issued. You can also buy and download lessons from video tutorials.[3]

Foxford-Netology programs Group. They will help to pass the school course in all subjects, find a teacher and solve complex problems.

ABBYY Lingvo-three programs were created from the Russian company to learn another language. Only here is not a series of lessons like Duolingo, but a set of high-quality translators, dictionaries and popular phrases are used.

Khan Academy-offers more than 4000 lectures free of charge on various subjects: mathematics, physics, history, biology, chemistry, economics and others. You can see them on the official website or download the program. Of course, there are more lectures in English, but important parts are translated into Russian.



Quizlet teaches on the card. In it, it is possible to prepare for exams (in different disciplines), sharpen the mind, you can create and create cards yourself, or you can use the Variety left by other users. The application helps to remember any important information in the form of a game, so it is suitable for almost all areas of study.

RESULTS

According to Ian Blair's research, there are more than 2,7 billion smartphones, 1,35 billion tablet users worldwide, and their number is increasing day by day.[4] given the availability of these devices in the majority of students, further use in the educational process can lead to positive results.

First of all, the use of mobile technologies in the educational process has the following advantages:

- Students can interact with each other and the teacher without hiding behind a large monitor;
- It is easier to accommodate multiple mobile devices than multiple computers in most audiences;
- Mini or tablet computers (PDAs) and e-books are lighter and take up less space than files, papers and textbooks and even laptops. Using the touch screen Help is easier than using the keyboard and mouse;
- Ability to share tasks and tasks and collaborate;
- Students and teachers can send, cut, copy and paste text via email, transfer devices within a group, infrared functions of a PDA or wireless network, for example, work with each other via Bluetooth;
- Mobile devices can be used anywhere, anytime, including at home, by train, in hotels;
- * ease of use in vocational training;
- Mobile technical tools, such as cell phones, gadgets, gaming devices, etc., will arouse interest in students - education.

Secondly, the following advantages of the use of mobile technologies in independent education are highlighted:

- M-learning through a mobile device allows you to be truly individual. Students have the opportunity to choose the content of the study based on their interest, as a result of which m-learning can be said to be student-oriented.
- Mobile flexibility, instant access to information needed for a particular job using mobile devices can enhance a person's productivity.
- Independent study and immediate submission of content-on-demand is a distinctive feature of m-learning. This allows users to train around the clock and create conditions for joint training and interaction.

Also, the main didactic features of mobile technology are interactivity, information content, visibility, autonomy, ease of use, as well as quick access and exchange of views. These didactic features determine the expediency and effectiveness of integrating mobile technologies and educational mobile applications into the educational process through the following:

Development of communicative, social-cultural and Information-Communication competences of students;

Organization of auditory and independent work;

Individual and group work organization;

Securing reverse contact;

Visualization of materials;

To formulate additional skills in the field of project specialization, it is necessary to perform tasks in the traditional and new formats, including in the field of ICT;

For the formation of professional practical skills, the implementation of formative control (the English Working term: formative assessment) as a component of the current control.

DISCUSSION

Creating an interactive learning environment requires the development of methodological support for this process. The identification of the theoretical and methodological basis for the integration of mobile technologies into the educational process includes the analysis of software and normative documents, as well as the experience of local and foreign specialists in the teaching of information and communication and mobile technologies (new for the last fifteen years) specialty subjects.

Since the integration of mobile technologies into the educational process is a new direction in internal methodology, there are many contraindications in this area:

With the introduction of new forms of training for the educational process (interactive lectures, discussions, project activities, etc.), it is necessary to establish the interactivity of the training and the lack of methodological assistance to these types of activities, including assignment forms;

Between the social need and the use of mobile technologies and educational mobile applications as an educational tool, as well as the implementation of tasks related to the typologies of mobile applications and systems, in particular, the lack of methodological provision in the process of teaching specialty subjects;

Between the competence of the teacher with the use of the latest information and communication and mobile technology in



professional activity established by the normative documents, their knowledge and skills.

One of the main conditions for the successful integration of mobile technologies into the educational process is the information and communication skills of the teacher, which consists of general-used, general-pedagogical and special-pedagogical components within the framework of science. The information and communication competence of the teacher should include the knowledge and skills on the use of mobile technologies that are the most modern and popular today.[5]

To determine the requirements for the integration of mobile technologies into the educational process based on the theoretical methods of conducting scientific research:

* analysis of software and normative documents (information and communication technologies as a component of teaching specialty subjects);

* summarizing experiences and methodical literature on the integration of mobile technologies into the process of teaching specialty subjects;

* it will be necessary to classify and systematize mobile applications that are suitable for use in the educational process.

CONCLUSIONS

Even though the number of modern mobile phones and communication devices is several times more than the number of personal computers, mobile devices are much cheaper than personal computers, and the power of modern mobile devices exceeds the power of computers in the early 90-is, in our country mobile phones are poorly used in the educational process. Based on the conclusions described above, this fact can be explained by the need to develop new strategies for the introduction of new technologies into the teaching process and the application of certain organizational efforts.

Undoubtedly, organizational, scientific and methodological work is necessary to introduce modern strategies, forms and methods into the educational process to take advantage of new opportunities for mobile education in the educational process.

Didactic features and related functions of mobile technologies (in particular, their interactivity, information composition, visualization, autonomy, ease of use, prompt application and the availability of feedback) contribute to the effective development of communicative, socio-cultural and Information-Communication competences of students.

Mobile technology increases the efficiency of not only students but also teachers. The use of

technology provides a quick connection between the teacher and the student, accelerates the process of evaluating and evaluating the learning outcomes. It is worth noting that the inclusion of mobile technologies in the educational process should be carried out step by step. Both the teacher and the student must first formulate the skills of using technology and then systematically develop it.[6]

In conclusion, we can say that mobile education does not replace traditional education by 100%, but it can be used as an addition to the educational process in a higher institution and as a component of mixed education. Active use of mobile learning does not aim to replace computers with portable devices but rather fills the learning environment with exciting new methods that are more approachable and more accessible to students.

Scientific research on the possibilities of mobile technologies and the conditions for their introduction in the educational system is carried out intensively, and today their practical application is developing in Uzbekistan.

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