IMPROVING THE USE OF MOBILE APPLICATIONS IN THE EDUCATIONAL PROCESS OF SECONDARY SCHOOL STUDENTS IN A DIGITAL LEARNING ENVIRONMENT

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Abstract. *This article provides detailed information on improving the use of mobile applications in the educational process of secondary school students in a digital learning environment.*

Keywords: *Yandex, BYOD, GYOD, iOS, Android, Windows Phone, JavaScript, PHP.*

INTRODUCTION

Law "On Education" and "National Training of Personnel program" was the beginning of a large-scale reform of the education system in the Republic of Uzbekistan. 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. 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 personnel training taking into account the needs of the information society. This is also happening in the education of the Republic of Uzbekistan, the state policy in the field of informatization "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."
Improving the system of personnel training in the field of information technologies is one of the important conditions for the successful implementation of the "Digital Uzbekistan-2030" strategy, the development of digital technologies and the wide introduction of them into the everyday life of the population, and it is defined as an urgent task and is being implemented in the educational process.[1]

LITERATURE ANALYSIS AND METHODOLOGY

That is why in the educational system of advanced countries, the research aimed at effective use of computer equipment and modern information and communication technologies is going on non-stop.

One of the main concepts of computer science is information communication technology. Technology, translated from the Greek (techne), means art, skill, knowledge, which in turn are processes.

Processes are a set of certain actions to achieve a set goal.

Mobile learning is a special form of learning that has the ability to combine individual, group and collective learning with curricular and extracurricular activities using mobile technologies. Education During the process, the phrase "Mobile education" can be interpreted as follows:

There are two main concepts of using mobile devices in education today: BYOD (bring your own device) and GYOD (give your own device). BYOD (bring your own devices) means

that students bring their own devices. GYOD (give your device). In this concept, students are given a mobile device.

A mobile application is software developed specifically for a specific mobile platform (iOS, Android, Windows Phone, etc.). Designed for use on smartphones, tablets, smart watches and other mobile devices. [2]

The possibilities of these created mobile applications for secondary school students.

– Mobile diary function

– Test dates and results

– provides an opportunity to test acquired knowledge in the field of computer science and information technology.

Advantages and disadvantages of using mobile applications during the educational process in secondary schools.

The advantages of using mobile applications in the educational process are as follows: you can use it anytime, anywhere;

– mobile education is often implemented in the form of a game;

– simplification of the procedure for conducting tests or individual assignments;

– control over the level of students' knowledge is carried out;

– accelerates the exchange of information between all participants using the mobile application during the educational process.

Disadvantages of using mobile applications in the educational process include:

– vision may decrease during prolonged use of a mobile device;

– students do not always have configured smartphones and tablets (BYOD competence);

– complexity of work planning;

– content filtering (or implementation of the "parental control" function);

– the reader can be distracted by other applications that are interesting.

Current trends in the educational environment using mobile technologies, their advantages and disadvantages are analyzed. In the modern world, almost every secondary school student has a mobile device. In addition, school students use mobile devices not only for entertainment or to obtain various information, but also to solve various problems.[3]

Recently, the emergence of special applications for learning has begun to be seen as an opportunity to use such mobile applications in the general education process. The analysis of world trends shows the viability of using mobile applications in educational activities to solve various pedagogical problems, to organize remote access to network and specialized resources and services of educational institutions. In the Karakalpak language, a mobile application was created for Karakalpak classes.

The program works in real-time (offline) mode. Users are software designed specifically for a specific mobile platform (iOS, Android, Windows Phone, etc.). Designed for use on smartphones, tablets, smart watches and other mobile devices. Program language: JavaScript, PHP, operating system: iOS, Android, program size: 8.8 mb. This mobile application is a mobile application that allows 5th and 8th grade students to test their knowledge of computer science and information technology. This application can be used not only by students of class 5 and 8, but also by students and teachers of higher classes. Also, parents of students will be able to use the statistics section of this application to find out how well their child has mastered computer science and information technology, which subjects he has good knowledge of, and which subjects he has

poorly mastered. The purpose of developing this mobile application is to increase students' interest in computer science and information technology and to give them the opportunity to check their knowledge level and guide them to work on themselves.

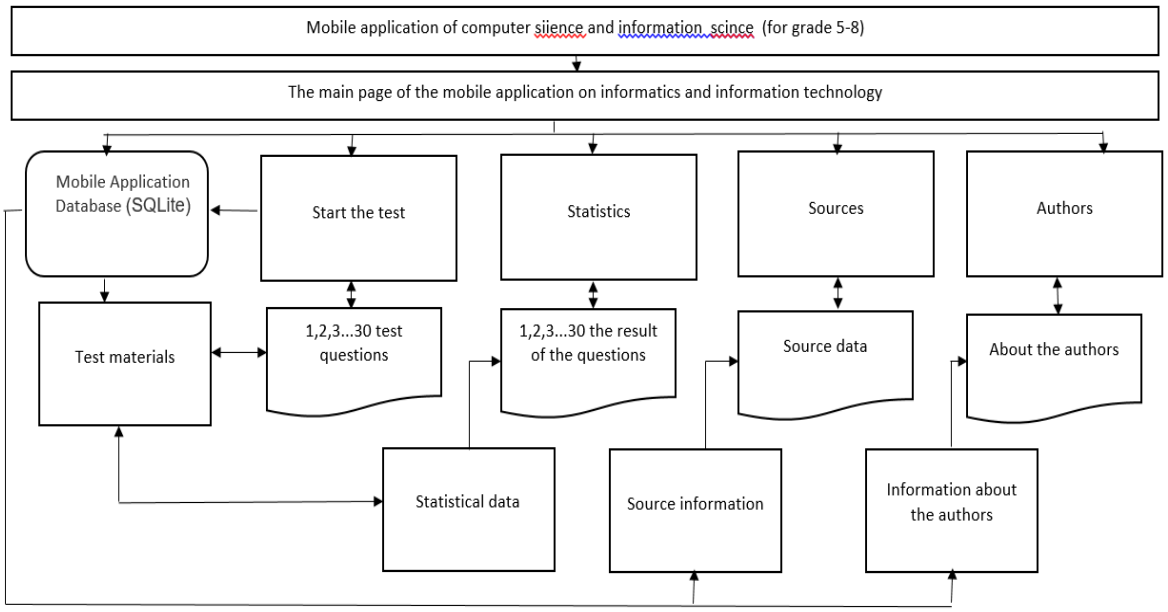

Fig-1. Schematic model of a mobile application from "Informatics and Information Technology".

There are 4 main sections of the mobile application and they are as follows.

• Start the test - through this section, you will have the opportunity to solve the tests for students of the 5th and 8th grades in informatics and information technology.

• Statistics - in this section, you can get information about how many times you took the test, how many you got right or wrong, which subjects you did well in, and so on.

• Authors – in this section you will get brief information about the authors who participated in the creation of this app and how the app works.

• Useful Resources – This section links to useful websites and social media channels.

Start the test - In the test, 30 seconds are given for each request, 900 seconds for 30 requests. If there is no time to answer the question, the question is automatically scored zero. Questions in the test are divided into 6 paragraphs by topic. These are divided into lessons 1-5, 6-11, 12-17, 18-23, 24-29, 30-34. The application displays 30 requests. Which question we came to will be shown on the left side of the application. You will be able to see if you answered the test questions correctly by swiping left to the place marked in red.

CONCLUSION

Changes in the digital educational environment associated with modern digital technologies have a rapid impact not only on the development of scientific knowledge, but also on the improvement of pedagogical and psychological knowledge in education. It is important to develop digital skills of students based on the perfect use of mobile applications and the analysis of the results obtained from test tasks in the introduction of modern digital technologies to education and the improvement of its use efficiency.

It is recommended to introduce and use digital technologies in the educational process, increase the efficiency of students, make full use of mobile applications, and develop their digital skills based on the analysis of the results obtained when completing test tasks.

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