

IMPROVING STUDENTS' INDEPENDENT LEARNING ACTIVITIES THROUGH THE USE OF MOBILE LEARNING TECHNOLOGIES

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Abstract

This article examines the improvement of students' independent learning activities through the use of mobile learning technologies. It analyzes the impact of mobile devices and digital resources on the effectiveness of education and student engagement. The use of mobile learning technologies creates opportunities for students to access educational materials independently and improve their learning outcomes.

Keywords

mobile learning, independent learning, digital technologies, students, learning effectiveness, student engagement.

Annotatsiya. Maqolada mobil ta'lim texnologiyalari asosida talabalarning mustaqil ta'lim faoliyatini takomillashtirish masalalari yoritilgan. Mobil qurilmalar va raqamli resurslardan foydalanishning ta'lim samaradorligi hamda talabalar faolligiga ta'siri tahlil qilingan.

Kalit so'zlar: mobil ta'lim, mustaqil ta'lim, raqamli texnologiyalar, talaba, ta'lim samaradorligi.

Today, the effective use of digital technologies in higher education is one of the important factors in developing students' independent learning activities. The opportunity to access learning materials anytime and anywhere through mobile devices and educational applications contributes to increasing students' engagement and independent learning skills. Therefore, integrating mobile learning technologies into the

independent learning process is a relevant issue.

The main purpose of independent learning is not only to teach students to complete assigned tasks but also to develop their ability to think independently. In this regard, the use of mobile technologies expands students' learning opportunities. For example, when a teacher assigns a task on a particular topic, students can search for the necessary information through online libraries, educational platforms, and other digital resources.

In this process, students should not be limited to simply copying ready-made information. It is important for them to compare the information they find, select relevant materials, and express their own opinions. Therefore, assignments based on mobile technologies should contribute to the development of students' thinking and analytical skills.

Another advantage of mobile learning is that students can access educational materials at any time. For example, if a student does not fully understand a topic covered in class, they can review the video lesson at home or in another convenient place, read electronic materials, or search for additional information. This helps students consolidate and strengthen their knowledge.

Research objective. The aim of the study is to identify and provide a scientific and methodological justification for effective methods of improving students' independent learning activities through the use of mobile learning technologies.

Research methods. The study employed methods such as the analysis and comparison of scientific and methodological literature, observation, questionnaires, pedagogical experiments, and analysis of the obtained results.

The content of assignments is particularly important when using mobile technologies. Students should not be limited to tasks such as reading a text or answering questions. It is more effective to provide tasks that encourage them to search for information, analyze it, and draw their own conclusions.

For example, students can find additional information on a particular topic, analyze the information they have collected, and prepare a brief conclusion. They can also watch a video lesson and identify and summarize its main ideas. Such assignments help students develop their independent learning skills.

The use of tests and questionnaires through mobile devices is also convenient. After completing an assignment, students can immediately view their results. If they make mistakes, they can review the topic again. In this way, students have an opportunity to independently monitor and evaluate their knowledge.

Teacher and Student Activities. In the context of mobile learning, the role of the teacher also changes to some extent. The teacher is not only a provider of knowledge but also acts as an organizer and facilitator of students' independent learning activities.

The teacher selects appropriate materials for independent learning, develops assignments, and monitors their completion. Students, in turn, complete the assigned tasks independently, search for additional information, and try to evaluate their own results. In this process, the assignments provided by the teacher should correspond to the students' abilities. Tasks that are too easy may reduce students' interest, while excessively difficult tasks may create unnecessary challenges. Therefore, it is advisable to gradually increase the complexity of assignments.

Advantages of Using Mobile Learning. One of the main advantages of using mobile technologies is that learning becomes more convenient and flexible. Students can study educational materials at a time that is convenient for them. In addition, mobile technologies provide access to a wide range of electronic educational resources.

Through mobile learning, students develop skills such as searching for information, analyzing it, making independent decisions, and monitoring their own activities. These skills are necessary not only during their studies but also in their future professional careers.

However, there are also certain challenges associated with the use of mobile technologies. Internet quality, the technical capabilities of mobile devices, and students' level of digital competence can affect the learning process. In addition, students may sometimes use mobile phones for purposes unrelated to education instead of using them as learning tools.

Therefore, the use of mobile technologies should be organized based on clear objectives and a well-defined plan. If students are clearly informed about which sources to use, what tasks to complete, and how to present the results, the effectiveness of mobile learning can be significantly improved.

Table 1. Opportunities of Mobile Learning Technologies in Independent Learning

Mobile technology	Form of use	Opportunities for students
Smartphone	Studying electronic materials	Independent learning anywhere
Tablet	Watching videos and presentations	Visual understanding of the topic
Mobile applications	Completing tests and exercises	Reinforcing knowledge
Electronic library	Searching for scientific sources	Independent information search
Online platforms	Completing assignments	Monitoring learning progress
Communication platforms	Communicating with the teacher	Quick questions, answers, and consultations

Table 2. Stages of Organizing Independent Learning Activities

Stage	Student activity	Teacher activity
1. Planning	Becomes familiar with the task	Defines the objectives and assignments

2. Searching	Searches for information	Recommends relevant sources
3. Learning	Studies electronic materials	Provides methodological guidance
4. Practical activity	Completes the task independently	Monitors the process
5. Assessment	Completes a test or assignment	Evaluates the results
6. Analysis	Identifies mistakes	Provides recommendations and feedback

The data presented in the tables show that the use of mobile learning technologies makes it possible to organize students' independent learning activities in a systematic and step-by-step manner. In this process, students independently search for and study educational materials, complete assignments, and monitor their learning outcomes. The teacher, in turn, organizes the process, provides the necessary guidance, and evaluates students' activities. As a result, students' engagement and level of independence in the learning process increase.

Discussion. The use of mobile learning technologies helps change students' attitudes toward independent learning. In traditional education, students tend to rely mainly on materials provided by the teacher, whereas in a mobile learning environment, they have more opportunities to independently search for and use additional sources.

In particular, the use of electronic textbooks, video lessons, online tests, and educational platforms helps students study a topic in different ways. Students can review topics they have not fully understood, check their knowledge through tests, and identify their mistakes. This has a positive effect on the development of self-monitoring skills.

At the same time, the effectiveness of mobile technologies depends on how they are organized and used. Simply using a mobile device does not automatically improve the quality of education. The teacher should select appropriate assignments, provide students with clear instructions, and give feedback on their completed work.

Conclusion. In conclusion, mobile learning technologies can serve as an effective tool for improving students' independent learning activities. They enable students to access educational materials conveniently, conduct independent research, complete assignments, and monitor their own knowledge. Integrating mobile learning with independent learning helps students develop skills in information searching, analysis, time management, and independent decision-making. Therefore, the systematic use of mobile learning technologies in higher education can contribute to improving the quality and effectiveness of students' independent learning.

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