

The Current State Of Organizing Independent Learning Through Mobile Applications In Higher Education Institutions

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Abstract: This article analyzes the current state of organizing independent learning through mobile applications in higher education institutions of Uzbekistan. The research highlights the growing role of mobile technologies in creating flexible, student-centered learning environments and supporting self-directed education. It examines the integration level of mobile technologies in universities, the digital competence of teachers, and students' practical experiences in using mobile applications for educational purposes. The study also identifies the main challenges hindering the effective implementation of mobile learning—such as insufficient methodological frameworks, unequal access to digital infrastructure, and limited pedagogical models. Comparative analysis with international practices demonstrates that successful mobile learning integration requires both technological readiness and methodological adaptation. The findings emphasize the need to develop national mobile learning platforms, improve ICT competence among teachers, and design pedagogical models suitable for Uzbekistan's higher education system.

Keywords: Mobile learning; independent learning; higher education; digital competence; mobile applications; educational technology; Uzbekistan.

Introduction: In the modern era, the integration of digital technologies, particularly mobile applications, into the higher education system has elevated the learning process to a qualitatively new level. Mobile technologies enable students to master learning materials anytime and anywhere, conduct independent research, and build their own personalized learning trajectories. From this perspective, analyzing the current state of organizing independent learning through mobile applications in higher education institutions is one of the key factors in improving education quality. This section examines the current state of independent learning processes in higher education institutions, the level of integration of mobile technologies into the educational process, and students' practical experiences in using mobile applications for self-study.

The current state of independent learning in higher education. In the education system of the Republic of Uzbekistan, independent learning is regarded as a means to strengthen students' knowledge, skills, and competencies, as well as to expand their opportunities for self-development. According to the Regulations on

Higher Education, students' independent work is defined as an integral part of the learning process, in which the learner, under the guidance of the instructor but based on self-regulated time management, acquires knowledge. Observations show that in many higher education institutions, independent learning is still conducted mainly in traditional forms — through printed materials, classroom tasks, and written assignments. This limit efficient use of time and resources. Therefore, integrating mobile technologies into the learning process has become a crucial direction for improving independent learning in modern education.

The general state of integrating mobile technologies into the learning process. In recent years, the digital education infrastructure in Uzbekistan's higher education system has been gradually developing. The use of platforms such as Moodle, Google Classroom, EduApp, Ziyonet, and Coursera is expanding. However, a fully developed model of independent learning based on dedicated mobile applications has not yet been established. As noted by Yu. Shishkovskaya (2019, 2020, 2021), mobile technologies allow learners to manage

their own learning activities, engage in self-assessment, and study interactively. According to her, mobile learning can be effectively integrated into both general and higher education systems and may serve as a complementary tool for distance or corporate training programs. In Uzbekistan, some initial efforts have been made in this direction. For example, the “Smart Education” platform at Tashkent University of Information Technologies and “Mobile Pedagogy” at Tashkent State Pedagogical University named after Nizomiy have been developed to digitize certain aspects of the learning process.

The practical state of students’ independent learning through mobile applications. Survey and observation results indicate that although the rate of mobile technology usage among university students is high, its application for educational purposes remains relatively low. Students mainly use mobile devices for internet searches, reviewing electronic textbooks, taking tests, communicating, and exchanging information. The integration of mobile learning technologies into the educational process is implemented in the following forms:

- displaying multimedia learning materials (audio, video, graphics);
- quick access to educational websites and electronic resources;
- working with dictionaries, encyclopedias, and reference materials;
- maintaining online communication between teachers and students (via Telegram, Google Meet, Zoom, Webinar, etc.). These approaches confirm the practical value of mobile learning, as they help students develop self-directed learning, self-management, and time organization skills.

Existing problems in implementing mobile learning technologies. Several issues still hinder the full integration of mobile technologies into higher education in Uzbekistan:

- insufficient digital competence among some instructors;
- lack of specialized mobile applications and learning resources;
- unequal internet quality and technical infrastructure across regions;
- incomplete methodological framework for mobile learning content. To overcome these issues, it is necessary to adapt curricula to digital education requirements, provide ICT competence training for teachers, and develop national mobile learning applications.

Foreign experience and comparative analysis. In many countries such as the United States, South Korea, Singapore, Finland, and Japan, mobile learning has become an integral part of the education system. For instance, in South Korea, the Smart Campus system allows students to manage all academic processes through mobile devices. In the U.S., platforms like Blackboard and Canvas integrate independent learning, assignment assessment, and teacher–student communication within a single environment. These experiences demonstrate that the success of mobile learning depends not only on technical tools but also on the correct selection of pedagogical models and methodological approaches. Therefore, it is essential to develop methodological models of mobile learning suited to the context of Uzbekistan’s higher education system.

Conclusions based on the analysis. The analysis reveals that there are initial positive experiences in organizing independent learning through mobile applications in Uzbekistan’s higher education institutions, but systematic implementation and methodological improvement are still required. Mobile learning stands out for its flexibility, convenience, and interactivity, and serves as an effective means of developing students’ self-management, critical thinking, and responsible decision-making skills.

CONCLUSION

The application of mobile technologies in higher education marks a new stage in organizing independent learning. Through mobile applications, students not only acquire knowledge but also manage their learning activities, interactively communicate with instructors, and evaluate their own learning outcomes. Therefore, developing scientific and methodological approaches to independent learning based on mobile applications will serve as both theoretical and practical foundations for the next stages of this research.

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