

Mobile Education

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ANNOTATION

The article discusses the directions of using mobile learning in modern education. It is noted that despite the wide distribution and availability of mobile phones among students, mobile learning is not widespread in our universities. The technical and psychological readiness of students to use mobile technologies in education is analyzed.

KEYWORDS: mobile learning, methods of mobile learning, student's readiness to mobile learning

Currently, information and communication technologies are winning a decisive victory in the field of education around the world. In most schools and almost all universities, computer learning environments have been created, networks for professional development of teachers and teachers have been created, there are hundreds of portals of well-known universities and foundations that offer open educational resources in the form of training courses and textbooks in all fields of knowledge. A new direction in education has emerged and is developing – mobile learning.

Mobile learning is any learning activity that predominantly or exclusively uses portable devices - phones, smartphones, tablets, sometimes laptops and the like, but not ordinary desktop computers. (IADIS International Conference Mobile learning)

The first attempts to organize an environment in which the student would not depend on a stationary computer, but could move with him both inside and outside the school, began almost at the same time when portable computers became available. The main directions for the use of mobile computers in education were outlined by Alan Kay . According to his plan, " dynabooks " were to become the main tools of the educational process. With their help, children would be able to create their own programs, read e-books and communicate - both in school and beyond.

The introduction of mobile learning has become possible thanks to a wide range of functions of modern mobile devices, which today, in particular, include: voice communication, messaging, graphics exchange, Internet browsers , etc.

Using the capabilities of students' mobile devices, the mobile learning system can solve the following educational tasks:

- Transfer of administrative information to students (schedule, tuition fees, etc.);
- personal media library of electronic educational resources, work with educational content (textbooks, reference books, dictionaries, audiovisual information);

- Organization of trainings using training programs, search engines and Internet resources, collective interaction between students and teachers, additional services (global positioning system, etc.);
- counseling;
- instant messaging, information forwarding;
- webinars , social networks;
- Testing and other types of progress control.

Mobile learning functions in real time, providing up-to-date information materials. On the one hand, it is individual; on the other hand, it is based on cooperation, the creation of learning communities. Thus, when using mobile learning, a high degree of socialization of students, the development of communicative competencies and the ability to work in a team are achieved.

Advantages and disadvantages of mobile learning.

Mobile learning is a real, not a theoretical possibility. In the course of research, UNESCO highlights a number of advantages of mobile learning:

Mobility. Mobile devices allow you to organize the learning process regardless of place and time. This mobility has two aspects: on the one hand, it means the ability to implement educational programs where highly qualified specialists cannot physically be. On the other hand, modern technologies, namely cloud storage systems, allow learning without being tied to specific devices. The student can change the cell phone, but at the same time all his learning materials will be available. In addition, he can use different technical devices to perform different tasks.

Continuity of education. Compared to the past, when the use of information technology was focused on desktop computers, projects in the field of mobile education require students to have continuous and uncontrolled access to technology. Mobile devices that are always with a person and belong to him personally make the education process continuous: since students can complete tasks at any time, teachers can take the passive part of learning outside the classroom, and use school time to develop social skills. Students, for their part, can choose how and when they complete assignments outside of school. The continuity of education has another manifestation: mobile phones make it possible to continue the educational process even in areas of disasters and military conflicts. UNESCO studies show that this contributes to a faster recovery of society after crises.

Personalization of learning. Mobile devices allow students to independently choose the level of difficulty of tasks and content, advancing in learning at their own pace. In addition, a mobile phone allows each student to perceive the material in a way that is more convenient for him. This means that the developers of educational programs for mobile, in order to be more effective, should use different ways of presenting the same information: text, graphics, images, videos. Mobile applications allow students to independently evaluate their results and quickly solve problems by completing the necessary tasks to consolidate the material.

Improving the quality of communication. Mobile devices allow building fast and high-quality communication between teachers, students and educational institutions. Student feedback allows teachers to track performance statistics individually for each student. In

addition, with the help of a mobile teacher organizes the continuity of learning.

This is not all the benefits, other sources present other benefits. For example:

- Opportunity to use the latest technologies in teaching.
- Ability to use light, compact, portable devices in training.
- Mobile learning is well suited for a wide variety of learning activities, as well as blended learning applications.
- With the help of mobile technology, you can provide quality support for learning in any format.
- Mobile learning can be a good support tool for teaching people with special needs.
- Mobile learning is well suited for young people.
- Allows you to significantly reduce costs.
- Gives you the opportunity to use new ways of developing educational content.
- Provides ongoing, targeted learning support.
- Allows you to create an interesting, exciting and convenient learning experience.

Despite the undoubted advantages of introducing mobile learning, the use of mobile devices for educational purposes is associated with its own difficulties and problems. The problems and disadvantages of implementing m- leaning include:

1. Technical problems:

small size of screens and keys on mobile devices;

problems with access to the Internet;

mobile devices run on batteries only;

the amount of memory available on mobile devices;

problems of information security;

Lack of unified standards in connection with mobile platforms, device characteristics;

the need to process conventional electronic content for mobile devices;

risks associated with the loss of a mobile device.

2. Social and educational problems:

not all students can afford to purchase a suitable mobile device;

problems in connection with the evaluation of learning outcomes;

problems in connection with the security of educational content;

too rapid development of mobile technologies;

underdevelopment of pedagogical theory for mobile learning;

conceptual differences between e-learning and mobile learning;

Issues related to the security of personal information.

Taking into account these complexities and problems, the development of educational content for m- learning should be carried out taking into account such features as: the division of content according to the level of complexity, the presentation of content in small portions, the use of "light" graphics, audio and video. Particular attention should be paid to issues of information security and protection of intellectual property.

Judging by the dynamics of development and improvement of mobile devices and network technologies given earlier, all of these problems will be resolved in the foreseeable future.

Mobile applications.

mobile application is a program installed on a particular platform that has certain functionality that allows you to perform various actions.

The importance of mobile applications for education is growing not only due to their general availability and attractiveness in terms of new technologies, but also due to the opportunities they provide: students working together on assignments, taking learning outside the school, everyone has the opportunity to speak out, take part (in contrast to from the system with a show of hands). The use of mobile applications for educational institutions allows you to:

- Implement unified control over the level of knowledge of students;
- Simplify the conduct of tests and examinations;
- Accelerate the exchange of information between all participants in the educational process, simplify the process of interaction between teachers and students;
- To intensify and modernize the educational process;
- Organize a distributed educational resource;
- Ensure joint activities of students without reference to the location of the participants in the educational process;
- Use your mobile device as your personal media libraries of educational, methodical and reference materials;
- Connect a mobile device to devices and devices in the network of an educational institution for educational and research purposes;
- Use mobile applications and built-in sensors to collect information about the environment for educational and research purposes.

Speaking about mobile applications for education, it is worth noting their ability to access cloud services, which are used as a single information field for storing information about students and teachers, indicators of educational activity.

Рустамова, Д. (2019). БОШЛАНҒИЧ ТАЪЛИМДА ИНТЕГРАЦИЯЛАШГАН ЎҚИТИШНИНГ АҲАМИЯТИ. *Scientific Bulletin of Namangan State University*, 1(12), 341-344.

Niezova, M., & Rustamova, D. (2020). Ona tili darslarida oquvchilarni mustaqil fikrlashga o'rgatuvchi interaktiv va noan'anaviy metodlari. *Молодой ученый*, (4), 480-481.

Tursinova, M. M. T. (2021). OZBEKISTONDA RUS TILINI RIVOJLANTIRISHGA QARATILGAN CHORA-TADBIRLAR. *Студенческий вестник*, (17-8), 44-45.

Toyirovna, R. D. (2021). Critical Thinking Process in School Children. *International Journal of Culture and Modernity*, 11, 165-168.

Muhammadkadirovna, G. D., Abdulhamitovna, S. H., & Qizi, R. D. T. (2022). The Role of Innovative Training Methods in Individualization Training. *Spanish Journal of Innovation and Integrity*, 6, 272-279.

Qizi, R. D. T., & Qizi, M. F. M. (2021). Developing the critical thinking of primary school students. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(10), 769-772.

Urinboyevna, E. Y. (2021). Classification of Integrative Education. *International Journal of Culture and Modernity*, 11, 162-164.

Urinboyevna, E. Y. (2021). Theoretical Bases of Integration of Educational Process. *International Journal of Innovative Analyses and Emerging Technology*, 1(7), 57-61.

Urinboyevna, E. Y., & Shahruza, R. (2021). About Gender Equality and the Process of Ensuring It. *International Journal of Innovative Analyses and Emerging Technology*, 1(7), 54-56.

1. Adkhamjanovna, K. M., Mirzakholmatovna, K. Z., Raxmonberdiyevna, T. S., & kizi, M. M. B.. (2022). Increasing Interest in the Lesson through Extracurricular Activities. *Spanish Journal of Innovation and Integrity*, 6, 256-261.
2. Alijon, A., Xoldorovich, S. Z., Abbosovna, G. M., & kizi, M. M. A.. (2022). Technology of Individualization of Learning. *Spanish Journal of Innovation and Integrity*, 6, 291-297.
3. Farkhodovich, T. D., kizi, D. M. S., & kizi, A. U. Y.. (2022). Critical Thinking in Assessing Students. *Spanish Journal of Innovation and Integrity*, 6, 267-271.
4. Jamshid, O. (2022). On The Contributions of Jadids to Uzbek Pedagogy. *International Journal of Innovative Analyses and Emerging Technology*, 2(5), 7-10.
5. JV Tojimatovich, M Baxtiyor (2019). КОМПЬЮТЕР СИНФЛАРИДА АМАЛИЙ МАШГ'УЛОТ ЖАРAYONINI БОШQARISH. Международной научной конференции «НЕПРЕРЫВНОЕ ОБРАЗОВАНИЕ В УСТОЙЧИВОМ .
6. kizi, O. N. K., kizi, B. M. U., kizi, S. Z. M., & kizi, K. G. T.. (2022). Education Creation Training Multimedia – Means. *Spanish Journal of Innovation and Integrity*, 6, 249-255.
7. Kochkorbaevna, K. B., Pulatovna, N. G., & Nurmahamatovna, O. Z.. (2022). It in Individual Learning. *Spanish Journal of Innovation and Integrity*, 6, 284-290.
8. Muhammadkadirovna, G. D., Abdulhamitovna, S. H., & Qizi, R. D. T.. (2022). The Role of Innovative Training Methods in Individualization Training. *Spanish Journal of Innovation and Integrity*, 6, 272-279.
9. Mukhtoralievna, Z. S. (2022). ANALYSIS OF SPEECH DEVELOPMENT IN BILINGUAL CHILDREN. *Modern Journal of Social Sciences and Humanities*, 4, 382-388.

10. Mukhtoralievna, Z. S., & G'aniyevna, M. M. (2022). Oral and Written Forms of Speech. *International Journal of Culture and Modernity*, 13, 39-43.
11. Mukhtoralievna, Z. S., & Madaminkhonqizi, S. M. (2022). Methods of Mnemonics in Pedagogical Work with Elementary School Students. *International Journal of Culture and Modernity*, 13, 44-52.
12. Mukhtoralievna, Z. S., & Salimakhon, M.. (2022). Psycholinguistics and Neurolinguistics of Bilingualism. *Spanish Journal of Innovation and Integrity*, 6, 387-391.
13. Mukhtoralievna, Z. S., & Saminjanovna, M. S.. (2022). Formation of Future Primary School Teachers Skills to Use Project Activities. *Spanish Journal of Innovation and Integrity*, 6, 346-353.
14. Mukhtoralievna, Z. S., & Tavakkalovna, A. G.. (2022). History of Information Technologies in Education. *Spanish Journal of Innovation and Integrity*, 6, 359-363.
15. Muxtoraliyevna, Z. S., & qizi, M. M. M.. (2022). The Concept of a Poetic Text and its Features. *Spanish Journal of Innovation and Integrity*, 6, 418-423.
16. Nigora Olimovna, S. (2022). MAKTABGACHA TA'LIM TASHKILOTLARIDA HAR BIR YOSH GURUHIDA TEVARAK ATROFNI IDROK ETISHNING O'ZIGA XOS XUSUSIYATLARI. *Results of National Scientific Research*, 1(1), 115–119.
17. Olimovna, S. N. (2022). FORMATION OF QUANTITATIVE REPRESENTATIONS IN THE SECONDARY GROUPS IN PRE-SCHOOL EDUCATIONAL ORGANIZATIONS. *INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor: 6.876*, 16(01), 58-60
18. Otajonov, J. (2018). DEVELOPMENT OF PEDAGOGICAL–PROFESSIONAL EXCELLENCE OF FUTURE PRIMARY SCHOOL TEACHERS. *Zbiór artykułów naukowych recenzowanych*, 194.
19. Otajonov, J. (2018). DEVELOPMENT OF PEDAGOGICAL–PROFESSIONAL EXCELLENCE OF FUTURE PRIMARY SCHOOL TEACHERS. *Zbiór artykułów naukowych recenzowanych*, 194.
19. Saidova, N. O. (2021). MAKTABGACHA TA'LIM MUASSASASINING HAR XIL YOSH GURUHLARIDA ELEMENTAR MATEMATIK TASAVVURLARNI RIVOJLANTIRISHGA OID ISHLARNI TASHKIL QILISH. *Academic research in educational sciences*, 2(11), 1612-1614.
20. Sobirjonovich, S. I. (2021). Didactic Interaction as Whole Integral Education. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(7), 80-83.
21. Sobirjonovich, S. I. (2021). Professionalism as a Factor in the Development of the Pedagogical Activity of the Future Teacher. *Journal of Ethics and Diversity in International Communication*, 1(7), 76-81.
22. Sobirjonovich, S. I. (2021). Professionalism as a Factor in the Development of the Pedagogical Activity of the Future Teacher. *Journal of Ethics and Diversity in International Communication*, 1(7), 76-81.

23. Sobirjonovich, S. I. (2021). Speech Education for Children from 1 To 3 Years of Age. *International Journal of Innovative Analyses and Emerging Technology*, 1(7), 135-141.
24. Sobirjonovich, S. I. (2021). Teaching Preschool Children in a Second Language. *International Journal of Culture and Modernity*, 11, 406-411.
25. Sobirovna, U. O. . (2022). The Use of Mnemotechniques in Teaching Younger Schoolchildren. *Spanish Journal of Innovation and Integrity*, 6, 446-450.
26. Sohiba, Z., & Gulnoza, R. (2022). LINGVOKULTUROLOGIYADA “SOG’INCH” KONSEPTINING QO’LLANILISHI VA O’ZIGA XOSLIKLARI. O’ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI, 1(8), 711-717.
27. T Dilnavoz (2020). The impact of syblings in the family on the psychological characteristics of the child. *ACADEMICIA: An International Multidisciplinary Research Journal* 10 (9), 445-449
28. Tojimamatovich, J. V., & Alimdjanovna, X. M. (2022). Basic Concepts of the Smart Home System. *International Journal of Culture and Modernity*, 17, 7–13.
29. Valijonovna, K. I., Rakhmatjonovich, T. D., Mukhtoralievna, Z. S., & kizi, S. G. G.. (2022). Informational Technology at Education. *Spanish Journal of Innovation and Integrity*, 6, 262-266.
31. VT Jo'raev, D Jumonzorov, QM Mamajonov (2019). Veb texnologiyalari bo'yicha "start web" windows ilova dasturi.
30. Xolmatova, Z. T., & Xolikova, D. M. (2022). TALABALARDA INNOVATION FIKRLASH KO’NIKMALARINI SHAKLLANTIRISH VA RIVOJLANTIRISHNI TAKOMILLASHTIRISH MODEL. *International Journal of Philosophical Studies and Social Sciences*, 2(4), 139-144.
31. Зулфия Тиловолдиевна Холматова ТАЪЛИМ ЖАРАЁНИДА ГЕНДЕРЛИ ЁНДАШУВ ДАВР ТАЛАБИ // *Central Asian Academic Journal of Scientific Research*. 2022. №3.
32. Отажонов, Ж. М. (2016). ФАКТОРЫ ФОРМИРОВАНИЯ ГАРМОНИЧНО РАЗВИТОГО ПОКОЛЕНИЯ В УЗБЕКИСТАНЕ. *Актуальные научные исследования в современном мире*, (6-1), 66-68.
33. Саидова, Нигора Олимовна, Рустамова, Шохсанам Шухратжон Кизи МАКТАБГАЧА ЁШДАГИ БОЛАЛАРДА МАТЕМАТИК ТУШУНЧАЛАРНИ ШАКЛЛАНТИРИШНИНГ ЗАМОНАВИЙ ТЕХНОЛОГИЯЛАРИ // *ORIENSS*. 2021. №Special Issue 2. URL: <https://cyberleninka.ru/article/n/maktabgacha-yoshdagi-bolalarda-matematik-tushunchalarni-shakllantirishning-zamonaviy-tehnologiyalari> (дата обращения: 13.06.2022).
34. Уринова, Ф. У., & Отажонов, Ж. М. (2015). К проблеме ситуационно-позиционного обучения педагогов системы повышения квалификации. *Актуальные проблемы гуманитарных и естественных наук*, (4-2).
35. Уринова, Ф. У., & Эркинова, Ш. Ё. (2013). Значение инновационной индивидуальной работы в повышении эффективности самостоятельной учебной

- деятельности студентов. Актуальные проблемы гуманитарных и естественных наук, (12-2).
36. Бакиров, Т. Ю. (2011). О ЗНАЧЕНИИ КУРСОВ ПО ВЫБОРУ В ПОДГОТОВКЕ УЧИТЕЛЯ МАТЕМАТИКИ. Педагогические науки, (6), 185-188.
 37. Бакиров, Т. Ю. (2021). Об изучении темы «Комплексные числа» в общеобразовательной школе и в вузах Республики Узбекистан. Физико-математическое образование, (5 (31)), 17-22.
 38. ГВ Авазовна (2021). Классификация сказок о животных по их структурно-семантическому признаку. Преподавание языка и литературы 1 (8), 74-77
 39. ГВ Авазовна (2022). THE SOCIOLOGICAL NATURE OF THE ADDRESS. EPRA International Journal of Research and Development (IJRD) 7 (7), 81-86
Уринова, Ф. У. ПЕДАГОГИЧЕСКАЯ АКСИОЛОГИЯ КАК ЧАСТЬ ПЕДАГОГИЧЕСКОЙ ИННОВАТИКИ. УЧЕНЫЙ XXI ВЕКА, 36.
 40. Bakirov, T. Y. (2020). USE OF THE IDEA OF DIDACTIC ADVANCEMENT THE METHOD OF TEACHING BETWEEN MATHEMATICAL DISCIPLINES. Scientific Bulletin of Namangan State University, 2(7), 432-438.
 41. Bakirov, T. Y., & Turgunbaev, R. M. (2019). IMPROVING THE TEACHING OF SCIENTIFIC CONCEPTS ABOUT THE LINE IN INTERDISCIPLINARY COMMUNICATION IN THE PROCESS OF PREPARING FUTURE MATHEMATICS TEACHERS. Scientific Bulletin of Namangan State University, 1(10), 278-287.