PEDAGOGIKA

UDK: 37:004.738.5 DOI: 10.56292/SJFSU/vol29_iss3/a40

TA'LIM JARAYONIDA MOBIL TA'LIMNING TAHLILI VA TAVSIYALAR

ANALYSIS AND RECOMMENDATIONS ON MOBILE LEARNING IN THE EDUCATIONAL PROCESS

АНАЛИЗ И РЕКОМЕНДАЦИИ ПО МОБИЛЬНОМУ ОБУЧЕНИЮ В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ

Katayeva Mukarama Maxmudovna[1]

[1]**Kataeva Mukarama Maxmudovna** – Namangan Engineering-Construction Institute PhD student

Annotatsiya

Ushbu maqolada mobil texnologiyalarning ommaviyligi, hayotimizning barcha jabhalarida faol ishtiroki, mobil texnologiyalarning inson hayotining ta'lim, tijorat, siyosat, ko'ngil ochar va boshqa sohalariga kirib borayotganligi, ta'lim jarayonida mabil ilovalarning ahamiyati va ularning ta'lim jarayonini samaradorligini oshirishdagi axamiyati, ta'lim jarayonida mobil qurilmalardan foydalanish ta'lim oluvchilarni motivatsiyasini oshirish, mustaqil o'zlashtirish ko'nikmasini rivojlantirishga yordam berishi haqida aytib o'tilgan. Olimlar Alan Key, Yu. Eremin, E. Krilovalar fikrlari, M. Ragus, M. Sharples, Mohammed Aliy va boshqa olimlar ishlaridan misollar keltirilgan. O'zbek olimlarini bu sohadagi ilmiy izlanishlari haqida aytib o'tilgan. Mobil o'qitishni ommaviy tarzda o'quv jarayoniga tatbiq etish va ularning ahamiyati. Mobil o'qitishda multimediyadan foydalanish va axborot almashinuvini jadallashtirish, mobil texnologiyalardan foydalanish, ta'lim oluvchilarning shaxsiy psixologik va fiziologik xususiyatlaridan kelib chiqib, individual yondashishda mobil qurilmalarning moslashuvchanligi haqida fikrlar berilgan. Raqamli O'zbekistonni bunyod etishda, uning ilk poydevorini qurish yo'lida, ta'lim jarayonida raqamli texnologiyalar – mobil texnologiyalardan foydalanish, o'zimizning milliy mobil ilovalarimizni yaratish va ularni dars mashg'ulotlariga tatbiq qilish va dars samaradorligini oshirish haqida tahlil va tavsiyalar.

Аннотация

В данной статье сделан анализ и даны рекомендации о популярности мобильных технологий, их активное исспользование во всех сферах нашей жизни, проникновение мобильных технологий в образование, торговлю, политику, развлечения и другие сферы жизни человека, значение мобильных приложений в образовательном процессе, в повышении эффективности образовательного процесса. Использование мобильных устройств в образовательном процессе способствует повышению мотивации, развитию навыков самостоятельного обучения. Даны воззрения Алан Ки, Ю. Еремин, Е. Крыловых, приведены примеры из работ М. Рагус, М. Шарплес, Моҳаммед Алий и других ученых. Было отмечено о научных исследованиях узбекских ученых в этой области. Внедрение мобильного обучения в образовательный процесс в массовом порядке и их значение. Приведены использование мультимедиа в мобильном обучении и ускорение обмена информацией, использование мобильных технологий, гибкость мобильных устройств в индивидуальном подходе с учетом личностных психологических и физиологических особенностей обучающихся. В целях построения цифрового Узбекистана, закладки его первого фундамента были внесены предложения по использованию цифровых технологий – мобильных технологий в образовательном процессе, созданию собственных национальных мобильных приложений и внедрению их в классную деятельность, совершенствованию эффективности класса.

Abstract

This article analyzes and makes recommendations on the popularity of mobile technologies, their active participation in all areas of our lives, the penetration of mobile technologies into education, trade, politics, entertainment and other areas of human life, the importance of mobile applications in the educational process and their importance in improving the efficiency of the educational process, the use mobile devices in the educational process, it is noted that this helps to increase motivation, develop independent learning skills. Scientific thoughts of Alan Key, Y. Eremin, E. Krylov, examples from the works of M. Ragus, M. Sharples, Mohammed Aliy and other scientists are given. It was noted about the scientific research of Uzbek scientists in this area. The introduction of mobile learning in the educational process in droves and their importance. The use of multimedia in mobile learning and the acceleration of information exchange, the use of mobile technologies, the flexibility of mobile devices in an individual approach, taking into account the personal psychological and physiological characteristics of students, are given. In order to build a digital Uzbekistan, laying its first foundation, proposals were made to use digital technologies - mobile technologies in the educational process, create their own national mobile applications and implement them in class activities, improve class efficiency.

Kalit so'zlar: *mobil o'qitish, mobil ilovalar, ta'lim, internet, mobil ta'lim, masofaviy ta'lim, multimediya, raqamli texnologiya.*

Ключевые слова: *мобильное обучение, мобильные приложения, образование, интернет, мобильное обучение, дистанционное обучение, мультимедиа, цифровые технологии.*

Key words: *mobile learning, mobile applications, education, internet, mobile learning, distance learning, multimedia, digital technology.*

PEDAGOGIKA

INTRODUCTION

In recent years, new modern concepts have begun to emerge at various stages of the educational system. For example, we can include information communication technologies, mobile technologies, Internet technologies, innovative educational technologies, and modern pedagogical technologies among the terms that are becoming a trend and have even reached the peak of usage in some regions.

These days, it is inappropriate to talk about the popularity of mobile technologies, their active participation in all aspects of our lives. Mobile phones have become a part of our life, we are used to using its services every day. Currently, everyone can imagine that mobile technologies have penetrated into education, commerce, politics, entertainment and other spheres of human life, becoming its witness and user. It would be safe to say that the ability to publish information on the Internet has become a basic requirement for every person.

MATERIALS AND METHODS

As we know, since the 30s of the 20th century, there was a correspondence form of education. At the same time, according to the educational experience of foreign countries, remote teaching methods were introduced into the education system with the help of radio lectures (1932), radio courses (1943), and television lessons (1960-1970). In Uzbekistan, since 1970, special lessons on mathematics, physics, biology and other subjects, as well as sports lessons on chess, have been shown.

In order to increase the effectiveness of education, Alan Key gave the idea of bringing the computer to the size of a book in the 70s of the last century. Since the 1990s, the creation of pocket computers has led to the establishment and development of mobile education for students. The first educational applications for such an educational environment began to be created.[1]

At the international conference organized in European countries in 2002, various researchers discussed the place and role of mobile educational technologies, the application of mobile devices to the educational process, and the theoretical and practical aspects of using mobile educational resources in teaching.

In 2002, a mobile learning consortium was also established in Canada, which included several large companies, as well as Seneca College and the Northern Alberta Institute of Technology. As a test, 300 students studied an accounting course using mobile communication to access audio and video resources[2].

Yu. Eremin, E. Krylova, based on the analysis of foreign and domestic pedagogical literature, note that most reviews of the concept of "mobile education" (M-Learning) are based on the technological features of mobile devices or the didactic possibilities of their use.

Learning from the network on the basis of mobile technology was thoroughly studied in scientific research works of V.A. Kuklev. Also, M.A. Grigoreva's scientific research studies have studied the issues of teaching computer science on mobile computer systems, and organizing the teaching of mathematics and linguistics on the basis of mobile systems in the projects of G.Stead and G.Colley. In Australia, Great Britain, Italy, Canada, Cyprus, Mexico, New Zealand, Poland, USA, Turkey, Chile, Sweden and South African countries, educational technologies based on internal information and telecommunication tools (mobile computer systems: phone, tablet and smartphone) are widely used.

For instance, M. Ragus[3] analyzed the Australian mobile learning network, M. Sharples [5] considered teaching in the era of mobile devices, Mohammed Ali [4] considered electronic resources in the form of educational objects; A. Andreev[6] analyzed the prospects of using portable personal computers in the distance education system, developed a classification of portable personal computers, formed their didactic features and functions; G. Zhukov [7] distinguishes as the main principle of mobile education: learning at any convenient place and convenient time; I. Savinykh [8] analyzed the mobile portal's possibilities of using mobile devices for SMS-tests, SMS-requests, SMS-messages.

A.A.Abduqadirov, M.M.Aripov, U.Sh.Begimkulov, Sh.B.Bekchonova, A.R.Davlatova, M.Q.Lutfillaev on the implementation of information and communication technologies in the process of training future specialists in higher educational institutions of our country , A.I. Olimov, A.R. Sattarov, B.M. Suropov, M.R. Fayzieva, T.T. Shoymardonov conducted scientific research.

M.M. Nafasov developed recommendations for improving the technology of creating educational mobile applications and the methodology of their use.

RESULTS AND DISCUSSION

The use of mobile devices in the educational process helps to increase the motivation of learners, to develop independent learning skills. It is appropriate to introduce mobile learning into education.

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.

In the educational process, the phrase "Mobile learning" can be interpreted as follows:

- Device in education (optional mobile devices and network technologies);
- Teacher (during training, the device can be located in the classroom or outside the classroom);
- Application to the educational process depending on the type of lesson (virtual-teacher on the Internet from another school, city or region).

Thus, from a technological point of view, mobile education is the transmission and reception of educational materials on an optional portable mobile device with the ability to access the Internet, search and receive materials, answer questions on the forum, and try (test) using WAP or GPRS technology. is to do.

Mobile education is a systematic activity conducted through compact, portable, mobile devices and technologies that enable learners to be more effective in their learning process by accessing, creating, and communicating information.

Mobile education is the ability to receive or present information in any format on personal mobile devices[9]**.**

Mobile education is an opportunity to learn through mobile technologies regardless of time and place.

In the last decade, the phrase "mobile learning" or "M-Learning" appeared in the English-language scientific and pedagogical literature, and experiments were conducted on its use as various methods and methods.

M-Learning is a type of education that is carried out with the help of mobile devices and technologies.

J. Traxler[10] stated: "Mobile learning will change the entire educational process. Education remains timely and individualized.'

D. Kelly[11] states that mobile education is not a process of moving educational materials to a small screen and using mobile devices, but a way to introduce innovative educational forms: educational microblogs, news feeds, educational course broadcasts, etc. emphasizes.

In order to apply mobile education to the educational process in a mass way, it is necessary to pay attention to the following organizational and pedagogical requirements, including:

- Organization of mobile classes based on tablets, netbooks and laptops in educational practice;
- Training based on the BOYD (Bring your own device) method (learners bring their own mobile device to the training).
- It is advisable to allow free access to the Internet in the educational institution not only in the auditorium, but also in the corridors, in the library, in the hall of activists, and to organize special areas.

The advantages of mobile learning are:

1. Gives students the opportunity to freely change the place;
2. Enables students with disabilities to study using mobile devices;
3. There will be no need for a personal computer and paper educational literature;
4. With the help of modern wireless technologies, the distribution of educational resources among users is facilitated (WAP, GPRS, EDGE, Bluetooth, Wi-Fi);
5. Mobile education uses multimedia content, that is, information is expressed in different forms (text, graphics, audio);
6. Availability of the opportunity to monitor the learner (Participation monitoring);
7. Encouraging (motivational) nature of the educational process;
8. The same control of the level of education of students regardless of their region;
9. Acceleration of information exchange between the participants of the educational process;

10. Based on the personal psychological and physiological characteristics of learners, the creation of wide opportunities such as the flexibility of mobile devices (Individual approach) in the individual approach helps to organize the comprehensive activities of the pedagogue.

In this case, the effectiveness of learning and retention of educational resources increases, motivation to learn develops. If the students are interested in completing the tasks given by the teacher, then any teacher will have the opportunity to observe the revitalization of the audience, the development of motivation for learning and the increase in the efficiency of mastering, and to achieve its further development.

To sum up, it can be said that teachers do not have to constantly fight to attract the attention of learners, by using mobile technologies in the educational process, a new educational environment is created that automatically encourages their participation, encourages them to learn and always work on themselves.

Many practitioners and industry experts believe that in the future, mobile education will become a new standard in the field of education and will rise to the level of a trend.

Moreover, mobile applications not only make the educational process more convenient, but also simplify the solution of organizational issues.

In addition, the widespread use of mobile technologies for educational purposes helps to increase the motivation of students to study, solves the problem of gaps in learning, and in the course of the lesson, students are given the opportunity to shine, achieve, rise, realize their potential, and regularly improve themselves. provides the opportunity to receive training.

In creating digital Uzbekistan, on the way to building its first foundation, using digital technologies - mobile technologies in the educational process, creating our own national mobile applications and applying them to classes, every science teacher should feel that he is involved in this work, ultimately, professors, teachers, students also helps them to achieve high results in the era of digital technology revolution. This will certainly serve to impart the most up-to-date knowledge and skills to the growing future generation.

REFERENCES

1. Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг Олий Мажлисга Мурожаатномаси. 2017 йил, 22 декабр. www.prezident.uz (Обращение Президента Республики Узбекистан Шавката Мирзиёева к Олий Мажлису.)

2. M. Uschold. 2018. Demystifying OWL for the enterprise. *Synthesis Lectures on the Semantic Web: Theory and Technology* 8, 1 (2018), i–237. DOI: DOI: https://doi.org/10.2200/S00824ED1V01Y201801WBE017. (Korxona uchun OWL ning sirini ochish)

3. Ragus M. «Mobile Learning: Handheld innovations in flexible learning». Project Report. New Practices in Flexible Learning, Australian Flexible Learning Framework, 2004. (Mobil ta'lim: moslashuvchan o'rganishda qo'lda innovatsiyalar)

4. Ally M. «Developing Learning Materials for Mobile Learning» // «Mobile technology: The future of learning in your hands» th World conference on mLearning - Capetown, South Africa, 2005. [Elektronno'y resurs] https://www.researchgate.net/publication/312948343_Mobile_Technology_The_fu ture_of_learning_in_your_hands (Mobil ta'lim uchun o'quv materiallarini ishlab chiqish" // "Mobil texnologiyalar: ta'lim kelajagi sizning qo'lingizda)

5. Sharples M. , Taylor J. , Vavoula G. «Towards a Theory of Mobile Learning» Int J Technol Des Educ 18, 319–335 (2008). DOI: https://doi.org/10.1007/s10798-007-9028-2 (Mobil ta'lim nazariyasi sari)

6. Андреев А. В., Андреева С. В., Доценко И. Б. Практика электронного обучения с использованием Моодле. Таганрог: ТТИ ЮФУ, 2008 (Practice e-learning using Moodle.)

7. Жуков Г. Н., Матросов П. Г., Каплан С. Л. Основы общей и профессионалъной педагогики: учеб. пособие. - М.: Гардарики, 2009. (Fundamentals of general and professional pedagogy)

8. Кувшинов С. «M-learning – новая реальность образования» https://cyberleninka.ru/article/n/m-learning-novayarealnostobrazovaniya.pdf (M-learning is the new reality of education)

9. Еремин Ю., Крылова Е.. Использование мобильных технологий в самостоятельной работе студентов по иностранному языку в неязыковом вузе. http: \\goo.gl\xpmi (The use of mobile technologies in the independent work of students in a foreign language in a non-linguistic university.)

10. Трахлер.Ж. Surrent state of mobile learning \\ Mobile learning: Transforming the Delivery of Education and Training.-2009. (http:\\www.aupress.sa\index.php\books\120155)

11. Келли Д. Тонкости запуска проектов по мобильному обучению http: \\ www.ispring.ru\elearning-insighs\debbi-richards-pro-m-learning\ (The subtleties of launching mobile learning projects)

12. Эшназарова, М. Ю Мобил ўқитиш - олий таълимни модернизация қилиш сифатида, **Монография.** - Наманган., НамДУ илмий техник кенгашнинг 2021 йил 10 январдаги №1 сонли баенномаси, - 64 бет (Mobile learning as a modernization of higher education)

13. Eshnazarova, M. Y., Katayeva, M. M. (2021). Theoretical basis of mobile learning and use of mobile platforms. *International Journal on Integrated Education*, *4*(1), 184-187.

14. Эшназарова, М. Ю., Катаева, М. М., Мадаминжанов, А. Д. (2021). ТЕОРЕТИЧЕСКИЕ ОСНОВЫ

ИСПОЛЬЗОВАНИЯ ВОЗМОЖНОСТЕЙ МОБИЛЬНОГО ОБУЧЕНИЯ В ОБРАЗОВАТЕЛЬНОМ ПРОЦЕССЕ. *Экономика и социум*, (4-2), 1243-1247.(THEORETICAL FOUNDATIONS FOR USING MOBILE LEARNING IN THE EDUCATIONAL PROCESS.)

15. Катаева, М. М. (2016). Сложные стороны для создания дистанционного обучения в Наманганском инженерно-педагогическом институте. *Academy*, (6 (9)), 95-96.(Difficult sides for creating distance learning at the Namangan Engineering and Pedagogical Institute)
16. Katayeva, M., Kariyeva, M. (2018). NEW INFORMATION TECHNOLOGIES IN TRAINING ENGLISH LANGUAGE. *Мировая наука*, (5), 48-51.
17. Katayeva, M. M. (2022). Role of Erasmus Exchange Programs in High Education Development. *American Journal of Social and Humanitarian Research*, *3*(7), 78-80.
18. Анваров, А., Катаева, М. (2013). Стратегии для улучшения памяти. *Russian town Russian-American Magazine*, 22. (Strategies for Improving Memory)
19. Катаева, М. М. (2016). Иностранная языковая способность как ключевое умение. *Молодой ученый*, (1), 712-713.(Foreign language ability as a key skill.)