

Using Online Learning in Higher Education: Experiences and Prospects

Okhunov Tohirjan Ma'murjan son

Tashkent information technologies university Ferghana branch assistant

oxunov1316@gmail.com

ARTICLE INFO.

Keywords:

online learning, experiences,
prospects

Abstract:

This article covers the factors of implementation of the form of online education in the higher education system, as well as the experiences and perspectives of their use. The article examines in detail the practical importance of online education, foreign experience and the work being carried out in our country. It is also the best that can be used in online education online platforms are mentioned. The importance of each technology is revealed in the process of revealing the important features of online education, its advantages, and the laws of its application to the educational process.

<http://www.gospodarkainnowacje.pl/> © 2024 LWAB.

The history of online education dates back to 1700. In 1728, Caleb Phillips wrote to a Boston newspaper to engage students anywhere in the country to study shorthand. This was the beginning of online education.

Isaac Pitman has made significant contributions to the development of online education. 1840 In 2008, he sent everyone a letter with his lessons by mail. Next were C. Toussaint and G. Lanchenstein, who founded the Correspondence Institute in Berlin in 1856. Training was also done by sending letters with study materials, tests, etc. by mail.

In 1873, the first correspondence schools were established in the United States. Anna Eliot Ticknor pioneered the Ticknor society for women, distance students believed to have received education by mail. A year later, in 1874, Isaac Pitman proposed the creation of a curriculum by mail. In 1892, the University of Chicago created the first online education program, making it the first online educational institution in the United States. Since 1899, Queen's University in Canada has started distance learning for students. In the 60s, online education was recognized internationally and began to develop actively with the support of UNESCO. In 1963, the Prime Minister of England, G. Wilson, announced the creation of an "ethereal university" that should unite all educational institutions using online education, and on this basis, in 1969, the first Open University was established in England.

In the Republic of Uzbekistan, like developed countries of the world, special attention is paid to the

development of computer and information technologies. The decree of the President of our Republic "On further development of computerization and introduction of information and communication technologies" adopted on May 30, 2002, the relevant decisions of the Cabinet of Ministers and the instructions of OO'MTV on the implementation of the tasks arising from the formation of the national system of information, the introduction and use of modern information technologies in all areas, creates the basis for expanding the enjoyment of world information resources.

The state of development of modern technologies depends primarily on the intellectual potential of society, that is, the development of the education sector. Issues of educational content and quality are considered a priority. In both developed and developing countries of the world, special attention is being paid to informatization of education. Ways to develop education and increase its efficiency are being considered, special attention is paid to the introduction of new information technologies in education.

In the world, online education is widely used as an important link of the open education system. The use of information technologies and the Internet in education creates a basis for raising the quality of education. Training young people with modern knowledge is the main goal of the tasks arising from the Law "On Education" and "National Program of Personnel Training". In this regard, the source of highly qualified personnel training - higher education - sets responsible tasks.

A number of works are being carried out in our republic regarding the implementation of the "Law on Education" and the "National Personnel Training Program". In particular, the education system is being fundamentally reformed, and curricula are being created anew based on state standards. All this, in turn, requires a review of the methods of teaching subjects.

With the development of technology, the presence of only one computer is enough for teaching using technical tools. The computer has successfully taken over the functions previously performed by the TV, VCR, film projector, slide projector, etc. In addition, the quality of information transmission and storage, image quality has increased significantly. By now, computer literacy has become an important sign of culture, and in the future it will become a necessity for every person, wherever he works. So, computer work, teaching to use a computer will undoubtedly become a general job in the near future.

In this regard, it is necessary to reform the educational system in all educational institutions and higher educational institutions, to develop it on the basis of modern technologies and to widely involve them in practice, to study the innovations and achievements in the educational system of developed countries and to study them. It is appropriate to apply it in our country.

Online education is the implementation of legalized education in all its forms, relying on new communication and information technologies in the development of correspondence education. Therefore, the form of "Online education" is considered "education of the 21st century."

In recent times, the positive effects of online education have been proven. In this regard, NTU National University of Technology of the USA and OU - Open University of Great Britain are competing for the first place. In fact, the number of online teaching and learning institutions at the moment is enough to bring their classification. The analysis shows that they are divided into state and non-state groups, moving their teaching services in the countries' educational markets and vice versa. However, this type of education often includes humanitarian education. Online the corporate system of the training system is a separate class and is intended for training and retraining of organizations and production employees.

The reason for using online teaching in the educational process is that the reformation of the educational process in the educational system, the development of teaching methods based on new information technologies, and their wide implementation are today's requirements. In this case, it is appropriate to

introduce an online education system. In the early 1990s, the wide popularity of the Internet, especially the introduction of the WWW (World Wide Web) system, brought a new concept of online education in the educational system.

Online education is information and communication technologies, e-mail, Internet, video conferencing, audio, video data, and distance learning based on multimedia training manuals. method. For example, information on a new topic or subject can be transferred remotely to voluntary educational institutions in the regions. If Distance learning is the only method if there is no specialist in the field. Online education requires continuous activity from the student - interactive teaching will be done. This increases the quality characteristics of the specialist's knowledge and ability. The technology elements of online training have been considered for hundreds of years. An example of this from the Russian experience is the Moscow People's University named after General AMShanyavsky, Morekhodnaya schools in the city of Nakhodka. Here, VP Chernov introduced online teaching in 1987. It is known that in the world, information on scientific research is constantly growing, and the process of analyzing it is becoming more and more complicated. Today's specialist, no matter what field he works in, requires him to be aware of events and events related to his field and to constantly improve his knowledge level.

The introduction of modern information and communication technologies into the educational process has led to the creation of a new form of education - online education, in addition to traditional teaching methods. In online education, the student and the teacher are spatially separated and communicate with each other using specially created courses, control forms, electronic communication and other technologies of the Internet. Online education based on the use of Internet technology world information provides access to the educational network, performs an important series of new functions with the principle of integration and interaction.

Online learning allows all aspirants to continuously improve their skills. In the course of such training, the student learns independent teaching-methodical materials in an interactive mode, passes supervision, performs supervision under the direct guidance of the teacher, and communicates with other students of the "virtual study group" in the group.

People who do not have the opportunity to study in full-time departments of educational institutions due to certain reasons, for example, those who do not require health, who intend to change their specialty, or who are old and who want to improve their skills online education is a convenient form of education for Although the disadvantages of online education were clearly visible in the initial period, the development of information technologies began to allow to eliminate these disadvantages.

As a result of the increase in pedagogical opportunities, the use of modern technologies, including electronic software products, multimedia applications, was introduced in teaching.

The method of computer teaching, which is considered to be effective in realizing educational goals from electronic sound, image, and text forms of information, has entered education.

When talking about the quality of any education, it should be taken into account that there are different criteria that measure it. No one can make an absolute conclusion that the quality of traditional education is high. In both forms of education, there are high-quality, proven programs as well as ineffective, ineffective ones.

According to UNESCO, the number of people who want to get an education is greater than the number of places in educational institutions, and it is estimated that the number of students will increase from 165 million to 198 million by 2025.

Before the pandemic, distance (online) education was partially used in our country mainly in the system

of professional development. In general, most higher education institutions in our country were partially ready to conduct classes remotely. The Moodle system was created on the platforms of higher education institutions, and electronic resources on all academic subjects were placed in it. But this system could not fully meet today's demand. In addition, due to the pandemic, not only higher education, secondary special education, public education, preschool education systems had to switch to the distance education method. As a result of the measures taken on the basis of the President's order, distance technologies were introduced into the education system, and online classes were started for 7 million students and 500 thousand students, despite the difficult conditions.

Online education is a form of education based on information and telecommunication technologies, such as part-time and full-time education, including the best traditional and innovative methods, teaching tools and forms.

Online education is an educational system based on new information technologies, telecommunication technologies and technical means. It is a system that requires the learner to engage more independently by providing learning conditions and communication with the teacher based on certain standards and educational laws. In this case, the learning process does not depend on the time and place of the learner.

Development of online education in Uzbekistan and the world trend

With the development of information and communication technologies, the technological, economic and operational possibilities of online education have increased. The rapid shift to online education due to the COVID-19 pandemic has led to an increase in demand for online education services. In the United States, about 22 percent of graduate students and 11 percent of undergraduate students study online.

Online education revenue is expected to reach \$74.80 billion in 2023. A majority (75 percent) of academic managers agree that the learning outcomes of online courses are the same or better than those of classroom courses.

Between 2021 and 2026, the e-learning market share in the UK is expected to reach \$11.57 billion.

The proliferation of microlearning, where entire course topics are broken down into smaller chunks of video, audio, text or infographics, is one of the key trends in the UK eLearning market, driving market growth.

Today, there are certain online platforms such as Coursera and edX that offer online courses in partnership with more than 200 leading universities and companies around the world.

These online platforms allow people to earn Masters and Bachelors degrees from their hometown. Also, those studying through these platforms have access to the same curriculum as on-campus students.

After the quarantine measures, online education in Uzbekistan began to improve rapidly. In October last year, the Cabinet of Ministers approved the regulation on the introduction of online education in higher educational institutions.

Starting from the 2023-2024 academic year, state and private higher education institutions were allowed to train personnel in the field of online education.

In October 2022, Coursera and Uzbekistan signed a memorandum of cooperation in the field of IT education. The platform will share nearly 1.2 million free coding courses available as of 2023.

Electronic education the following reasons because of efficient is :

- of women work in the market participation increases (labor in the market 73.1 percent of men participation that 's enough indicator 39.9 percent in women organize is enough);
- families of girls education to get son to the children compared to less allocates funds . the world bank information according to , from 25 years old increased population between bachelor level

- have men the share of 20.8 percent , women share and 13.3 percent organize is enough ;
- disability has been to individuals higher education get for wide opportunities present is enough ;
 - in the country higher education with cover get level increases ;

ONLINE EDUCATION .

LMS systems are one of the modern technologies that can form a modern information technology and distance education (online) system. On the basis of new technologies (for example, in the "Moodle" system), tasks such as developing an individualized educational methodology, forming and improving the student's knowledge, and determining the level of acquired knowledge are solved. The use of distance learning technologies in the educational process has a strong impact on the positive changes in the content, forms and methods of education. In recent years, the type of electronic education through the Internet or Intranet network, which is used in the management of the educational system in the West, came under the term E-learning (electronic education). Electronic education is a broad concept that means various forms of education based on information and communication technologies. Among the many sources of electronic education organization, the following can be indicated: Authoring software products (Authoring tools), Virtual educational process management systems LMS (Learning Management Systems), Internal content management systems CMS (Content Management Systems).

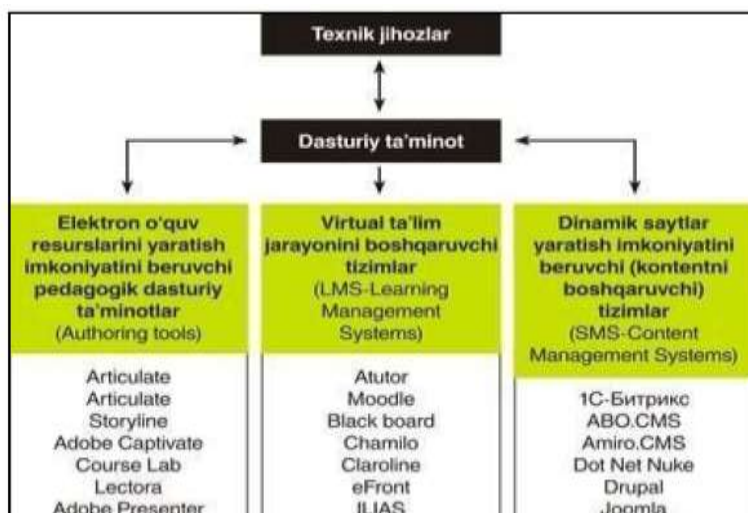


Figure 1. Software used in the organization of electronic education structure

Moodle is a powerful pedagogical software package that organizes teaching and online classes in the Web environment. This system has many training modules such as Forums, Materials, Messenger, Chat, Exercises, Group work, Student tracking.

Like other LMSs, it supports IMS, SCORM and other standards powers up. The analysis shows that, compared to other LMS systems, the software complex with the most additional plugins and modules is the Moodle software complex.

Currently, most of the world's educational institutions are implementing the Moodle software complex in the organization of their online education systems.

Ro'yxatga olingan saytlar	62,075
Davlatlar	220
Kurslar	8,552,462
Foydalanuvchilar	77,918,769
Ro'yxatga olinganlar	201,686,138
Forum xabarlari	157,059,272
Resurslar	77,155,402
Test savollari	350,454,047

Table 1. Statistics on Moodle (as of 15.09.20 23)

Also, many educational institutions in our republic are using the moodle software complex as a virtual learning environment. In particular, "Virtual educational environment" of Tashkent University of Information Technologies (<http://etuit.uz>), "Open educational and information center" of the National University of Uzbekistan, "Development of multimedia general education programs" under the Ministry of Public Education. Center" (<http://moodle.uzedu.uz>), Tashkent Turin Polytechnic University (moodle.polito.uz), Andijan Mechanical Engineering Institute (<http://moodle.andmiedu.uz>). The open-source moodle software complex is a special web-interface environment-oriented system that controls the educational process and is mainly intended for use in the global network. a number of open source software tools such as php, mysql, ajax, javascript html, css, xml jquery were used to create the system. The open-source Moodle software complex is a special system oriented to the Web interface environment that manages the educational process, and is mainly intended for use in the global network. A number of open source software tools such as PHP, MySQL, AJAX, JavaScript, HTML, CSS, XML, and jQuery were used to create the system. To use it, you need a database management program (MySQL or PostgreSQL), a PHP processor, and a server configured with Web service (Apache or IIS). As an operating system, one of the optional common operating systems can be used (Windows, Linux, Mac OS X, Novell Netw are). Moodle system version 2.9 was used at the time of writing this manual. The official web address of the system is: <http://www.moodle.org>.

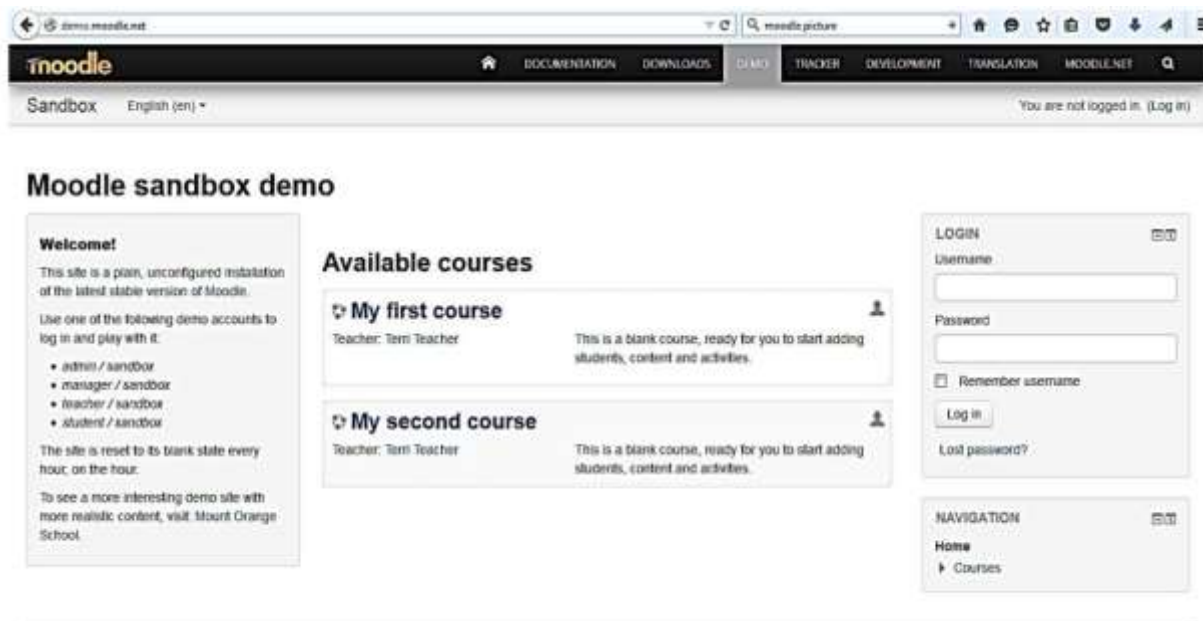


Figure 2. Overview of the Moodle software complex

The best online learning platforms

inexpensive forms of education are becoming more and more popular around the world. There are many resources on the Internet that provide the opportunity to independently receive free online education in various fields.



For this, it is enough to know the Internet and the language.

Below we provide information about the most popular free platforms that allow you to get independent online education.

Harvard University courses

Harvard University, which is considered one of the most prestigious universities not only in the USA, but also in the whole world, offers more than 100 free online courses.

In a special portal, you can find lectures on web programming, finance, religion, computer technology, culture, history, political science and other fields.

All you need to do is register. A themed platform is ready for you.

Address: *online-learning.harvard.edu*

Khan Academy

Founded as a non-profit organization by Harvard Business School graduate Salman Khan, Khan Academy aims to provide high-quality education to anyone, anywhere.

The online academy has more than 4200 micro-lectures on mathematics, history, medicine, finance, physics, chemistry, biology, astronomy, and culture.

Topics are explained in simple language. In addition, a set of tasks is provided to check knowledge on the studied topic. This platform is recognized as one of the best forms of online education. The database of lectures has been translated into many languages of the world.

The base of the Khan Academy is also being translated into Uzbek by a group of volunteers.

Address: *khanacademy.org - khanakademiyasi.uz*

edX is a platform that unites the world's best universities

The edX platform gathers the online database of the world's most prestigious universities - Harvard University, Stanford University, Boston University, Massachusetts Institute of Technology, Sorbonne University, etc. in a single address.

Here you can find educational video lessons on concrete, humanities, natural sciences, computer technologies. The platform also has lessons for the world's most spoken languages.

In addition, there is also an online forum for users to exchange ideas and discuss the lessons. The lessons are free, and after the course is completed, you can get a certificate for a fee.

Address: *edx.org*

A platform that explains physics in simple language

Ryshelevsky Lyceum in Ukraine, has opened an in-depth online course in physics.

Students of the course can get information about physics in a simple, understandable language. 470 Each of more than 10 topics is prepared in the form of a separate video.

Address: *"RL Physics" channel on YouTube*

Online aggregator platform

Online courses in various fields can be found on the platform known as **Class Central**. The platform sorts and ranks the courses posted on the Internet according to their popularity, ease of use and quality.

The best quality online courses can be found in the platform rating. The platform also has information on available formal online education programs.

Address: *classcentral.com*

Opportunity to learn both language and science

Coursera platform has more than 36 million users and includes more than 3,000 courses. It is possible to acquire knowledge in humanities, concrete and natural sciences in a comprehensive way.

Each topic consists of a 15-minute video lecture, tests and assignments to consolidate acquired knowledge.

At the end of each course, there is an exam, and the user who successfully passes it will receive a certificate in electronic form.

The advantage of this platform is that you can choose video lectures with subtitles in the language you want. In addition to learning the subject, it allows you to strengthen the necessary language skills.

Address: *coursera.org*

CONCLUSIONS

Online classes are the most advanced, transparent method and widely used all over the world. Regarding its quality, it should be said that a teacher who knows his field perfectly, regardless of the type of lesson, can fully explain the educational material in this field and convey it to the student's mind. In many cases, it depends on the level of the student's desire to master that knowledge.

Lessons like this are not as easy as some people think. It requires a lot of work from the teacher, to convey the lesson to the student in new ways, to prepare tasks, to master it. The teacher works with each student individually and spends a lot of time on him. The student usually interacts with the teacher during class or advisory hours. Online classes allow the student to communicate and communicate with the teacher continuously and organically. The teacher evaluates the activity of the student every day. The teacher prepares online lectures, lessons and assignments, literature, delivers them to the student, thereby constantly monitoring the student's activity.

Online classes are convenient for students. Pupil or student attends classes sitting at home. The student's expenses related to living, travel, meals, etc. will be saved. If the student completes the assigned tasks on time, he will have a better chance of mastering the subject than in the classroom, pursuing his career in the student's specialty or another field, and helping his parents. Online classes are widely used in the practice of developed countries and it is a very effective method. Because it teaches the student's independence, ability to make decisions, work on oneself, conceptual thinking, efficient use of time and planning. It is also possible to do some extracurricular activities.

Online from education use the following :

- ✓ education of the recipient time , conditions and technical tools to use according to to himself ok has been the work mode choose
- ✓ education receivers the number and scope expand ;
- ✓ the work with study , together , one at the time take to go
- ✓ independent education get activities expand ;
- ✓ distant from the teacher advice get , remote , free communication to do
- ✓ science electron learning and given assignments electron deliver
- ✓ educational , web materials in collaboration use , teacher by them often updated to go
- ✓ in health defect there is has been to individuals higher education get
- ✓ of the world optional at the point standing up optional at the time and optional in the place modern knowledge get

economic (way cost , bedroom cost) utility and another opportunities is giving

References

1. Mirziyoyev Sh.M. We will resolutely continue our path of national development and raise it to a new level. - T.: "Uzbekistan" NMIU, 2017. -592 p.
2. Higher education. Normative - a collection of legal and methodological documents. "Istiklal" - T., 2004.
3. A collection of normative and legal documents of higher education. - T., 2013.
4. 1. Will Dalton, Brian Turner. Best online learning platforms of 2021: LMS and VLE for education. <https://www.techradar.com/best/best-online-learning-platforms>
5. Akhmedov , BA, Khalmetova , MX, Rahmonova , GS, Khasanova , S. Kh . (2020). Cluster method for the development of creative thinking of students of higher educational institutions. Economics i Socium , 12(79), 588-591.

6. Jomurodov , D. (2020). Video lessons through training organize reach efficiency . Archive Nauchnyx Publication JSPI , 1(71).
7. Begimkulov U.S. Pedagogical in education modern information technologies current of reaching theoretical basics . Monograph . - T.: Science , 2007. -160 p