MOOCS - AS A NEW APPROACH TO DISTANCE EDUCATION

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Abstract. Modern education does not stand still. Today, the use of digital technologies in the educational process is no longer an innovation for anyone. The most widespread are open online education and distance learning. One of the most actively used areas of distance learning in the world has become Massive Open Online Courses (MOOCs). This study discusses new approaches to distance learning through the creation of MOOCs. It is shown that, thanks to these online courses, education is transformed into a mixed-system network. Distance and in-person forms of education with varying degrees of participation in the educational process enable many users in any corner of the world to get the knowledge they need through MOOCs and it is completely free of charge. This study describes the stages of MOOC development and its capabilities.

Key words: digital technologies, online learning, distance learning, open education, massive open online courses.

Basic provisions

Massive Open Online Courses (MOOCs) have played a big role in shaping open education. MOOC stands for Massive Open Online Course (MOOC). Thanks to these online courses, education is being transformed into a mixed system including online and in-person forms of study with varying degrees of participation in the educational process. The main idea behind the creation of MOOCs is the possibility of learning in these courses for any user located anywhere in the world. Video lectures, which can be taught by one or several lecturers, are considered the foundation of most MOOCs, but the real innovation is special technological platforms that allow one to package and combine knowledge in the most efficient way. A significant advantage of MOOCs is flexibility in time and place of classes, using modern educational technologies. Open online courses, providing many new opportunities for all participants, have a significant impact on both secondary schools and higher education. Around the world, active preparation of MOOCs has begun. Open online courses are firmly entrenched at all stages of the education and radically changes its focus. Ignoring these tutorials would be a big mistake. Kazakhstan must keep up with modern trends in education in the best universities

in the world. Open education allows one to practically have many types of freedom:

- open admission to a higher educational institution (as a rule, without analyzing the initial level of knowledge, without entrance examinations; the so-called "open door" policy),

- open planning of the learning process (drawing up an individual educational trajectory - a sequence of modules from the system of instructional courses in the corresponding program),

- freedom of choice for an instructor (determination of the teacher who would best meet the needs of the learners, especially in the future, when moving to educational consulting),

- freedom in choosing the time, rhythm and pace of learning (access to learning throughout the year, the absence of fixed terms of training),

- freedom in choosing the place of study (independent choice of the territory of study). [1]

Preparation and implementation of instruction in the open education system provides many forms of freedom that are different from traditional education. Each student can choose the goals, content, method, place and time of study, while teaching universities have the opportunity to follow different paths in the provision of educational services that meet the requirements of the labor market and social needs.

The below table shows some comparative characteristics of the forms of traditional and Open education.

Comparative characteristics of traditional forms and open education [2].

Introduction

Today, the whole world is rapidly progressing. The self-development of everyone is the key to their professionalism. Therefore, it is education that should provide a person with a variety of services that allow them to learn continuously, realizing the main view of UNESCO about "Lifelong Education". Open education becomes one of the most popular themes in the modern world education sphere.

Open education is interpreted as a "flexible form of education", which allows learning to become accessible to students (in comparison to traditional forms), while distance learning is becoming the main form of acquiring knowledge in open education. It should be remembered that open education, indeed, is available to anyone who asks for it, without analyzing a learner's initial level of knowledge and location because open education uses technologies and distance learning methods and provides learning at a pace that is convenient for each student. This system is designed to be adequate for the information society and contributes to the solution of the above tasks in the field of education.

Forms of traditional education. Instruction starts and ends according to the set dates

The student faces restrictions on the freedom of access to programming

The student must attend classes at an educational institution or workplace

The goals and content of the programs are determined by the educational institution

The sequence of instruction is determined by the program or the instructor

The speed of learning is dictated by the program, the instructor, and the group

The instructor provides support primarily through lectures

The student learns by attending lectures and seminars or studying scientific and methodological literature

Forms of open education. The learners decide when to start and end the study of the program, on their own,

The learner has greater access to the learning and teaching process

The students, on their own, decide about the location of the study

The students, after consultation with a tutor (teacher-consultant), determine the goals and content of instruction in accordance with their needs and interests

The student, together with the tutor, develops a study plan and schedule of classes

The student and the tutor agree on the pace of instruction

Tutors and students agree on a form of support, which can be provided in the form of face-to-face instruction or remotely

Instruction is delivered with the help of learning materials, which necessarily include goals, the content itself, self-assessment methods and other information for independent study

Open learning removes the space-time constraint in working with various sources of information. Information and its free flow play a critical role in open education. The 21st century is called the century of the information society, the technological basis of which is the creation of information networks capable of processing the growing amount of information. Information networks themselves are not new. But the integration of digital data processing by computers, telecommunication, modern methods of audio-video presentation of information, fiber-optic information transmission channels, etc. significantly increase the capabilities of such networks, leading to the creation of new information technologies (NIT). They combine video, audio, computer and telecommunication in new and unexpected ways. At the same time, the requirements for users are becoming more and more simple, and information services are becoming more individualized. It should be noted that we are talking not only about local, but also about global information networks, an example of which is the Internet. A global information infrastructure is gradually being created and extended to the entire world community.

Description of materials and methods

Massive Open Online Courses (MOOCs) can be seen as a means of expanding online learning opportunities with open access to courses and their scope, and they also provide an opportunity to introduce new business models that include elements of open education. Several unique MOOC platforms that offer

independent courses or courses in conjunction with a university have been developed. More and more universities have become interested in MOOCs to expand access, marketing, and promotion of their educational institution, as well as for the possible development of a new source of income. MOOCs provided free access to the latest courses that could reduce the cost of higher education and even change existing models of higher education. All of this has been taken up by elite universities and organized online courses by launching open learning portals such as edX. New commercial projects such as Coursera and Udacity were launched in partnership with prestigious universities, offering free online courses or charging a small fee for them. The new company Futurelearn was founded by the Open University in the UK with the aim of bringing together all free, open online courses from leading UK universities for learners from all over the world (Futurelearn, 2013). The rapid proliferation of MOOCs has generated commercial interest from venture capital firms and large corporations looking to enter the higher education market using a MOOC approach.

The concept of MOOC development is based on the ideals of open education: knowledge should be freely transferred from person to person, the desire to learn should be supported without any demographic, economic or geographical restrictions. Currently, MOOCs are deeply embedded in the education system of many countries around the world. For example, Udacity platform offers 11 courses in technical and humanitarian disciplines (S. Trun); Coursera - more than 400 courses (Stanford, Michigan and Pennsylvania universities), which today unite more than seven million students from all over the world. At the same time, the authors of these projects work very closely with universities when deciding which courses should be taught remotely, how to teach them, how to settle the delicate issues of certification, passing exams and tests, as well as defending theses and fighting plagiarism. But despite these seemingly winning moments, even these platforms failed to make it into the Top 10 Best Funded Startups. This is because the list of such EdTech projects turned out to be much wider, and today the most famous incubators in the field of education are: OpenEnglish, Desire2learn, Echo, Lumosity, Chegg, 2U, Edmodo, Kaltura, Orbis education, ImagineK-12, The Minerva Project, NASA, Startl, GoAlbook, Mindsnacks and many other startups that are gaining popularity all over the world. [3]

At its core, the MEP is a logical development of Open Educational Resources (OER). The term MEP is coined by researchers Dave Cormier of Prince Edward Island University and Bryan Alexander of the National Institute for Technology in Liberal Education in response to the "Connectivism and Connected Knowledge" course taught by George Siemens and Stephen Downs in 2008. More than 2300 students took part in this course. This phenomenon received even more attention and global resonance in 2011, when Stanford University professor Sebastian Thrun conducted a free online course titled "Artificial Intelligence" for 160000 students from 190 countries around the world. 28000 students successfully completed this course [4]. The Massachusetts Institute of Technology (MIT) created the OpenCourseWare project in 2002, and the Open University in Britain

created the OpenLearn project in 2006. Both projects represent the emerging open education movement. Influenced by MOOCs, many elite universities have created various open learning platforms such as the edX of the University of Massachusetts and Futurelearn of the Open University.

The emergence of innovations in MOOCs proves the interaction of various social, economic, and technical developments in the field of education in a global context. Open education can play an important role in ensuring access to education for all and in overcoming the challenges posed by an ever-changing environment. These changes include:

1. Globalization and increasing internationalization in higher education,

2. Increasing demand for access to higher education; it is expected that, by 2020, there will be 120 million students worldwide,

3. Changing student demographics with increasing numbers of adult students,

4. Wide access to technologies and means of communication,

5. The need to change prices, affordability, and economic models for higher education.

Results

For the practical application of massive online courses in the educational process, two areas can be distinguished. [5]

The first direction is the introduction of foreign online courses into the educational process as an elective. The students are provided with information and reference resources regarding various platforms, as well as specific recommendations for the search and selection of courses that students need.

The second area of work to promote massive open online courses in Kazakhstani universities, of course, is the development of their own courses. In Kazakhstan, MOOC trends are only gaining momentum. There are not many universities that have started working in this area. Today, initiated by the efforts of the Kazakh National University al-Farabi, a Consortium of Kazakhstani universities for the development of MOOCs in the Republic of Kazakhstan was created. It includes more than 20 universities of the Republic, including KazUIR & WL named after V.I. Abylai Khan. In 2016, the MOOC.KZ platform was developed, available at http://mooc.kz, which, as conceived by the creators, will become the prototype of the national platform. Further work certainly comes down to the creation of the courses themselves and their placement on this Kazakh platform, provided that the Ministry of Education and Science of the Republic of Kazakhstan will offer the necessary support to the creators of the platform. Today, AlFarabi Kazakh National University has already begun work on creating online courses and placing them on the Edx platform. They have developed more than 100 courses in 18 areas of education. Among them are such courses as Chinese language, Biotechnology, Statistics, Organization of scientific research, religious philosophy, etc., which have about 16,000 signed-up users with a daily visit of about 500 people. The KazUMO & WL named after Abylai Khan are also trying to

develop various online MOOC English courses for schoolchildren. This work was carried out with undergraduates of the 2nd year of study within the discipline of "Modern information technologies in foreign language education." Undergraduates selected the most popular topics and prepared MOOCs on them. The purpose of the development of MOOCs was to teach future schoolteachers to use all possible information resources to support the knowledge of the English language of schoolchildren. MOOC assignments were given in the form of project work in small groups of 4-5 people. Currently, the university is working on the development of MOOCs by leading instructors at the university.

Discussion

In sum, it should be noted that the educational process in universities should not be guided only by academic traditional occupations. It is very important to correctly use modern digital technologies to ensure high-quality training of specialists and take the best in education, which has already proven its effectiveness. MEPs promise to "open up" higher education by providing affordable, flexible, accelerated courses, free or at low cost, to students who are interested in studying. It should be noted that developing your own MOOCs is a daunting task. Developing a MOOC course requires the collaboration of many people, including video operators, course designers, IT and platform specialists, and others. In general, these courses require much more work than a simple university course taught by a single professor and perhaps a few teaching assistants, reaching a maximum of 100-300. Nevertheless, the labor costs of creating MOOCs are justified given the huge scale of the potential audience. So, using MOOCs, one instructor can teach thousands and tens of thousands of students at the same time. In order to create a MOOC, it is necessary to determine the project executors. The executors of the project include:
- the course manager,
- film crew (cameramen, editor, proofreader, and editor),
- course materials experts,
- the designer.

In turn, the project executors must clearly know their functionality. As a result, questions arise as to:
- where to look for such specialists,
- what their functional competencies are, and
- how much the labor cost.

The search for performers must be approached very responsibly. As it has already become clear, the development of MOOCs takes a certain amount of time. Therefore, universities wishing to create and use MOOCs in the educational process need to create a department for the development of MOOCs, which will be responsible for all technical support, from lighting to editing content. Shooting, sound recording, editing video materials, creating screensavers, multimedia inserts, etc. will lie directly on their shoulders. The maintenance of a staff of highly

qualified specialists will not be cheap, so it is necessary to find ways to reduce these costs. Each university must solve this issue independently. For example, the provision of paid services to other educational institutions (creation of MOOCs by order), the organization of paid advanced training courses for specialists based on MOOCs, the involvement of students and undergraduates in the process of creating MOOCs (creating a student multi-studio), etc.

Conclusion

MOOCs are the education of the future, allowing higher education to be "opened up" by providing affordable, flexible, accelerated courses, free or at low cost, to students who are interested in learning. Summarizing the above, it can be noted that modern education does not stand still. To comply with the trends of the world community and to make education more open to innovations, it is necessary to introduce into the system of Kazakhstani higher education everything new that has been accumulated in the world. This can lead to an increase in the quality of domestic education and meet the challenges of the 21st century.

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MOOC - ҚАШЫҚТЫҚТАН ОҚЫТУДЫҢ ЖАҢА ТӘСІЛ РЕТІНДЕ

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Аңдатпа. Қазіргі білім бір орында тұрмайды. Бүгінгі таңда оқу үдерісінде цифрлық технологияларды қолдану енді ешкім үшін жаңалық емес. Ең кең тарағандары - ашық онлайн білім беру және қашықтықтан оқыту. Әлемдегі қашықтықтан оқытудың ең белсенді қолданылатын бағыттарының бірі Massive Open Online Courses (MOOCs) болды. Бұл мақалада MOOC құру арқылы қашықтықтан оқытудың жаңа тәсілдері талқыланады. Көрсетілгендей, бұл онлайн курстардың арқасында білім алуан түрлі жүйеге, желілік және күндізгі оқу формасына айналады, бұл білім беру процесіне әр түрлі дәрежеде қатысады, бұл әлемнің кез келген бұрышында көптеген пайдаланушыларға мүмкіндік береді. МООК арқылы қажетті білімді толығымен тегін алу. Мақалада MOOC даму кезеңдері мен оның мүмкіндіктері сипатталған.

Тірек сөздер: цифрлық технологиялар, онлайн оқыту, қашықтықтан оқыту, ашық білім, жаппай ашық онлайн курстары.

MOOK - КАК НОВЫЙ ПОДХОД К ДИСТАНЦИОННОМУ ОБУЧЕНИЮ

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Аннотация. Современное образование не стоит на месте. Сегодня ни для кого уже не стало новшеством использование цифровых технологий в образовательном процессе. Наиболее широкое распространение получило открытое онлайн образование и дистанционное обучение. Одним из наиболее активно используемых направлений дистанционного обучения в мире стали Массовые открытые онлайн курсы (МООК). В данной статье рассматриваются новые подходы в дистанционном обучении через создание МООК. Показано, что благодаря этим онлайн курсам образование преобразуется в смешанную систему, сетевых и очных форм обучения с различной степенью участия в учебном процессе, что дает возможность большому числу пользователей в любом уголке мира получить нужные для него знания через МООК совершенно бесплатно. В статье описаны ступени разработки МООК и его возможности.

Ключевые слова: цифровые технологии, онлайн обучение, дистанционное обучение, открытое образование, массовые открытые онлайн курсы.