



Promotion of Mooc's Ideas in University Education: Status And Prospects

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ABSTRACT

The number of students enrolled in the massive open online courses (MOOC), universities and colleges that recognized and included MOOC in the educational process around the world is increasing every year, indicating an unprecedented success in the educational space. MOOC gave many students the opportunity to study in leading universities of the world on academic disciplines, topics, listen to lectures of famous scientists - researchers, thereby ensuring the openness and accessibility of higher education. This article provides an overview of the research of foreign and Russian specialists, in which the significance of online education in the development of universities, the scope of coverage of the audience, and countries with an analysis of specific examples of participation in promoting MOOC ideas has been studied. It also identified various problems in the implementation of MOOC in university education: a low percentage of students who did not complete the MOOC courses, a variety of motives, and expectations of participants in online courses, not only students, but also universities, the lack of an evaluation system, etc. The authors of the article consider that MOOC are innovative technology that has changed the traditional approach to university education in the transition to a digital society, an educational platform that allows you to practice and experiment Temporary forms and methods of education, to test new courses and disciplines, educational programs, to improve the participants in their professional and pedagogical, intellectual, cultural, social and personal abilities.



Introduction

In the traditional system of higher education there are global changes associated with the large-scale development of online education. In 2006, for the first time, massive open online courses (MOOC) were launched, which by gradually building up their potential, audience and pace, were the harbingers of new changes and transformation of higher education. For the first time, the concept of MOOC in 2008 was introduced by Dave Cormier in the description of the course “Connectivity as a theory of learning” by Siemens and Downes. At the beginning, the online -course has been designed for a group of 25 students who have made payment for the course and passed it to get credit. But the course was also available for those users who had registration. As a result, the course covered more than 2,300 people. In 2011, Sebastian Thrun and his colleagues at Stanford University developed the course “Introduction to Artificial Intelligence” with open access, which attracted about 160,000 students from 190 countries. MOOC has given many people the opportunity to study at leading universities of the world in popular academic disciplines, listen to lectures of famous scientists and researchers, thereby ensuring openness and accessibility of higher education (The New York Times, 2012).

According to the report of the Sloan Consortium for the period from 2012 to 2014, it is clear that the attitude of universities and colleges to MOOC was uncertain:

Table 1. The ratio of universities and colleges to the introduction of MOOC in the educational process (in %)

Year	Joined MOOC	Ready to join	Did not make decisions	Not joined
2012	2.6	9.4	55.4	32.7
2013	5	9.3	52.7	33
2014	8	5.6	39.9	46.5

As can be seen from Table 1, the number of universities and colleges that have recognized and included MOOC in the educational process is increasing. The main reasons for the increasing interest of educational institutions in MOOC were:

- important directions to improve the quality of education and university reputation;
- means for obtaining economic profit for the provided educational services;
- the possibility of obtaining funding from the state for promoting the development of MOOC (Sun & Jiang).

The growing popularity of the MOOC is confirmed by statistics on the number of students and universities. In 2016, 700 universities in the world offered 6850 courses. During this period, Coursera was one of the largest platforms of the MOOC, with more than 23 million students (Shah, 2016).

The participation of different countries in the creation and promotion of the MOOC, as well as institutional use of the MOOC in the national education system can be clearly seen in Table 2.

Table 2. The spread of MOOC in the world

USA	Europe	Asia-Oceania
Coursera (2012): 1905 courses	FutureLearn (2012, UK): 351 courses	KMOOC (2014, Korea): 18 courses
edX (2012): 975 courses	Open Classrooms (2007, France): 25 courses	JMOOC (2013, Japan)
Udacity (2012): 141 courses	OpenHPI (2012, France): 30 course	Xuetang (China)
Peer to Peer Univ. (2009)	iversity (2013, Germany): 93 courses	NPTEL (2006, India): 96 courses
NovoEd (2013): 77 course	ALISON (2007, Ireland)	Rwaq (2013, Saudi Arabia)
Canvas: 345 courses	MiriadaX (Spain): 168 courses	



	OpenLearning (2012, Austria)	
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MOOC in the higher education system have spread fairly rapidly in the USA, Europe, Asia-Oceania, for example, since 2008 Coursera and edX in the USA, FutureLearn in the UK, iversity in Germany, MiriadaX in Spain, KMOOC in Korea and OpenLearning in Asia-Oceania.

In 2017, almost 800 universities offered students more than 9,400 MOOC, and the number of students enrolled at Coursera reached 30 million students and the courses offered were 2,700 (Shah, 2017). The total number of participants in online courses in 2017 reached 81 million (Class-Central.com, 2017).

The basis of the concept of promoting MOOC is the idea 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” (Yuan & Powell, 2018). Since 2002, the idea of open education has begun to be supported by universities, although the popularization of the idea itself began in the 20th century. The Massachusetts Institute of Technology (MIT) created the OpenCourseWare project in 2002 and the Open University introduced the OpenLearn project in 2006. Based on the idea of the MOOC, prestigious world universities create open educational platforms: edX - University of Massachusetts, Futurelearn - Open University. Many researchers recognize the role of universities in promoting online courses, the MOOC, for example: Coursera in 2018 collaborated with 149 universities in the world. Thus, the MOOC is changing the scenario for the development of the higher education market, and the composition of players in the educational market.

Literature Review

Large-scale online learning is an occasion to rethink traditional university education. Many teachers and authors of online courses have noted that online education has changed their view and attitude to the traditional system of education (Pushkarev et al., 2019). They began to actively experiment different pedagogical approaches in organizing the process of teaching students, such as: “flipped class”, case projects, essays, project method, mutual assessment, video lectures, team work on projects, blended learning, etc. (Ezhov et al., 2019; Cherdymova et al., 2019) But these experiments are fragmentary, more dependent on teachers, on their level of digital competence and possession of modern technology, and personal interest in the introduction of new techniques as part of their discipline. Despite the emergence of a large number of pedagogical literature on digital teaching and learning in higher education, and the use of MOOC courses, there is no general discussion about how new technologies can change educational and learning processes (Langseth, 2018).

The predictions about the explosive effect, the tsunami effect, and the subversive potential of MOOC on traditional university education and the destructive effect on the university system did not materialize (Leckart, 2012; Friedman, 2012; Brooks, 2012).

But at the same time, as the statistics show, the increase in the number of students of the MOOC didn't ensure an increase in those who completed the full course. According to R. Mayer, the percentage of students at Stanford, Massachusetts and California universities who didn't complete the MOOC course of study is 80-90%. Of those who chose the program at the University of California, only 7% of the 50,000 students completed the course. Almost the same percentages of withdrawn students are noted on the results of the Coursera analysis - only 2% of those enrolled are issued certificates of full completion of the course, of which 0.17% are certificates with honors (Meyer, 2012).

S. White et al. (2017) explain the reasons for the high dropout rates of MOOC students by the following factors: the motives of the registered MOOC participants are diverse and have even greater differences with those



who study at university programs; perseverance, diligence, persistence, and independence for all participants in the process of training in the MOOC manifest themselves in varying degrees; Expectations of participants from MOOC courses and the actual situation may be incompatible, for example, the duration of the courses, the deadline, the complexity of the tasks, etc .; not all students could plan completion of the course; MOOC courses are free and there are no assessments, penalties for non-compliance, which provides an opportunity for self-decision and independence (White et al., 2017).

There is another point of view of researchers about the lack of assessment as a reducing factor of motivation and interest of students to complete the course. The authors believe that at this time, the need to introduce assessment in the MOOC educational environment as a new and important solution for further development still needs to be studied, since one of the important gaps of the MOOC remains the lack of a qualitative, trustworthy, effective tool for assessing students' knowledge. As a promising direction, a personalized assessment within the framework of the MOOC, standardized formal assessments that apply to all to the same extent is not quite the right way to achieve the optimal learning goals of each participant in online education is considered. In this regard, the development and integration of personalized assessment in MOOC is a very relevant topic for future research (Xiong & Suen, 2018).

D. Clow (2013) offers a motivation model for students to complete the MOOC course in the form of a funnel, which consists of levels: awareness-registration-activity-progress. In his model, J.P. Howarth et al. (2016), complements the “completion” level.

Despite the low number of students who completed the full course, the MOOC of large-scale education platforms like Coursera, EdX, and Udacity, and FutureLearn have become university partners. Mac Andrew writes that the MOOC is the most advanced business model and universities, characterized as a more conservative model, retaining its status quo, carrier and custodian of academic traditions. They in collaboration introduce innovative approaches and ideas, and non-standard initiatives education. Mac Andrew believes that it was universities that changed the business processes of online education companies: “Universities are not only carriers of academic tradition and system-wide efficiency, but also have an incredible potential for innovation and non-standard initiatives, only by realizing this truth, one can realize the potential of transformations existing in the system of higher education” (Quentin, 2018). “Universities continue to dominate the profitable segment of the market, and this once again proves that changing culture is more difficult than changing technology” (Sherman, 2018). Many MOOC providers are interested in cooperation with universities as providers of quality educational programs. For universities, the MOOC provides open access to a large audience of educational programs, the opportunity to experiment in the application of new technologies in teaching, expand ways of entering the education market, strengthen their awareness, position in the educational market of changing cyberspace, and form a brand. In addition, the placement of university MOOC on the international educational platform is one of the powerful ways to promote the culture of different countries, effective tools to strengthen the recognition status at the global level of national higher education systems. For example, universities in Asia — China, South Korea, Malaysia — create MOOC courses and promote them on popular online platforms as strategic objectives of the state, with the prospect of forming a higher education system that is recognized at the level of the world community and capable of creating worthy competition systems (Fadzil, Latif & Munira, 2015).



Results and Discussions

The MOOC platform recently began to place full courses of educational programs, which allows students to fully complete the course or partially. These forms of education on the MOOC platform make it possible to change the traditional system of education at the university. The difference between cMOOC and xMOOC from each other opens up new opportunities for online education.

Different concepts and pedagogical approaches to the idea, organizations of open education have created two different areas of the MOOC:

CMOOC is based on the theory of connectivity; based on a constructive approach to learning. The idea of the theory of connectivity was that the rate of emergence of information and new knowledge increases each time and one person cannot process all this. The appearance of a multitude of educational resources on the Internet does not guarantee the objectivity of all information; therefore, “trusted sites” and “correct” networks are created. The main focus is on joint training, and communication in social networks, in the process of which new knowledge is created based on the contribution and participation of each student (Tonybates.ca, 2014). There are no traditional curricula, programs, schedules of the educational process; courses unite like-minded people, independent of each other, who are not limited to the university, but the main subject is set by the introductory lecture; have access to platforms that allow traditional audiences to go beyond the boundaries, invited lecturers who are located in different countries, universities (Anderson & Dron, 2011). By the number of its audience, the cMOOC is much inferior to xMOOC. Researchers at cMOOC point out several possible problems associated with cMOOC: the learning environment can become chaotic, not always controlled; the environment requires a high level of digital literacy from users; the pace of learning, opportunities, level of education of the participants are different, so it may take a long time to achieve the goal; from the beginning of the course, participants, at their own discretion, change the form, rethink the given topic, which makes it difficult for the teacher to control the trajectory of the discipline. Since the participants themselves regulate their own curricula, their content is in accordance with the aim pursued, therefore the course generates its own trajectory (Sung-Wan, 2015);

XMOOC is based on the theory of behaviorism; the xMOOC model expands the pedagogical model through the use of video presentations, questionnaires and testing, thus the teacher has relative autonomy regarding the choice of structure, forms, methods of educational material, taking into account the capabilities of the educational platform.

The cMOOC and xMOOC models have completely different philosophical approaches and audience orientation. “The cMOOC is best suited for independent students who are willing to establish interaction within an open network of like-minded people and generate new knowledge based on this interaction in the digital environment. “The xMOOC organizes the learning process based on the prepared materials with predetermined results to be achieved and tests as evidence of the successful completion of the training” (Sherman, 2018).

The cMOOC participants are primarily interested in creating network communities, therefore, they need feedback on the discussion of common topics and questions, and xMOOC members strive to receive an assessment and a certificate (O’Toole, 2013).

Today, xMOOC leads in terms of audience reach, number of courses offered, and popularity among universities (Xiong & Suen, 2018). It is known that most people are interested in obtaining certificates, filling gaps in knowledge, and forming new competencies. But over time, the cMOOC can influence the transformation of the traditional learning model, since for the new network generation, this model is more in tune with their educational needs, reveals their creative possibilities, develops their individuality, uniqueness, and critical



thinking. Therefore, universities face serious problems - in the future, traditional forms of organizing student learning will gradually lose their importance and pedagogical potential; every year the worsening situation of uncertainty in society, on the labor market requires a revision of educational programs, educational technologies; search for new methods and forms of education in order to meet the expectations and demands of the new generation of youth with universal educational activities updated by new basic educational standards of the Federal State Educational Standards (ФГОС).

For many universities, the MOOC acts not as a technology destroying the university system, but as a complementary innovation that improves the traditional system of higher education, practicing and experimenting with new forms and methods of online education. For the Massachusetts Institute of Technology, the MOOC is an experimental space where they study which technologies and teaching methods are effective for teaching modern students (Bates, 2013). At San Jose State University, the MOOC is included in traditional homework training sessions (Jarrett, 2012). In Australia, "many universities are actively using virtual reality, but the traditional approach to learning and teaching retains its position" (Sherman, 2018). One of the reasons for considering the MOOC in higher education as an additional form of traditional education is the large waste of teachers' time on preparing classes, recording online lectures, visiting online events, and participating in discussion forums (Kolowich, 2013), although the main motive for the participation of professors in the MOOC is the desire to expand people's access to higher education around the world.

Another reason for the participation of universities in the MOOC can be considered a desire to increase the internal potential, the digital competence of their teachers, to create high-quality online courses to attract talented scientists and students. In the future, a change in the position of universities towards the targeted use of their own high-quality, accredited MOOC courses to increase tuition fees is expected, which will lead to a choice between accredited courses inside the campus and open-access courses of the MOOC off-campus (White et al., 2017).

The Use of MOOC Universities in Russia

In Russia, universities have recently begun to actively launch their online courses that are accessible to everyone. The quality of online courses, student activity, and site structure includes the results of the CourseBurg (2018) study "How the platform's MOOC lives in Russian realities" (courseburg.ru, 2018). Of all the MOOC platforms, the most popular among Russian students is coursera.org: the number of monthly visits is "897,838 thousand people; average visit duration (min) - 0:10:08 - the longest; in terms of bounce rates, the lowest is 35.98%." The "Open Education" platform is almost 3 times less than the "Coursera" in all respects. Edx which is the platform of the Massachusetts Institute of Technology, Harvard and Berkeley universities, compared to Coursera, is not quite popular; the site's attendance is almost 5.5 times lower. Of the Russian platforms, the most visited are "Openedu.ru" and "Universarium.org" (courseburg.ru, 2018).

Openedu.ru was created in 2015 on the initiative of 8 universities - the founders of the Association "National Open Education Platform". The Openedu.ru platform publishes online courses for members of the Association that meet the requirements of international standards and their own requirements for developing online courses. The association cooperates with partner universities, in which part of the educational programs are partially implemented on the basis of the online courses. At "Openedu.ru": students can use the materials of the online course for independent work, and the received certificates on the results of the course can be taken into account by the teacher in the current and final student knowledge control.



According to the analysis of the research data from CourseBurg Platform, MOOC in Russia offer users a diverse range of courses with or without a certificate, educational programs are distinguished by convenience and quality, and many online courses are developed by renowned professors and are of interest to a wide range of people. Despite the active position of Russian universities in creating online courses, the user rating of online courses for self-education lags significantly behind the United States and India.

Conclusion

The modern system of higher education should provide students with applied skills, academic knowledge, and advanced education, which will provide them with employment, relevance and competitiveness for their future work. Due to the fact that higher education increases the relevance of the use of digital educational technologies in the process of training future specialists, it is necessary to teach them to competently create and use a digital ecosystem.

The MOOC allows you to expand the knowledge gained by students in one discipline, and at university, to listen to materials, positions of professors, and leading scientists in a specific field of science of other universities. In cMOOC, a more advanced student can interact with other users and participate in or initiate the formation of new knowledge, thereby contributing to science, increasing the level of self-education. CMOOC audience is notable for its diversity of contingent, global coverage, unification of representatives from different professional fields, culture, languages, religious affiliation, age, hobbies, attitude to the world politics, life, knowledge and practice in the studied discipline, subject, unique life experience, and this symbiosis enriches social experience, provides an opportunity to go beyond the standard training session, expands the communication culture of all participants in the process. Perhaps, in a diverse socio-cultural community, situations of contradictions, discussions, conflicts may arise. And they can't always occur between the participants, but also in the student himself, when he learns in the educational process, compares himself with others, his capabilities, abilities, knowledge, experience and skills. The student feels a change within himself - personally sees his own and joint results, his expectations from university education are justified, and this is an indicator of the ideal level of high-quality higher education. For universities, student success is one of the strategic, key goals of higher education.

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