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Doctor of Pedagogical Sciences, Senior Research Fellow, **NATALIYA AVSHENYUK**
Institute of Pedagogical and Adult Education, NAPS of Ukraine
Address: 9 M. Berlynskogo St., Kyiv, 04060, Ukraine
E-mail: nataliya.avshenyuk@gmail.com

PRIORITY FIELDS OF TEACHERS' PROFESSIONAL DEVELOPMENT IN TERMS OF OPEN EDUCATION WORLDWIDE

ABSTRACT

The article is devoted to the problem of teachers' professional development within the concept of "open educational resources". The author analyzes the project "Massive Open Online Courses" (MOOC) as one of the modern achievements in the area of information and communication technology (ICT) for the development of adult education, namely teachers' professional development in the context of globalization. It has been determined that MOOC is an innovative form of free distance learning, which is represented by full-fledged interactive training courses based on open access to the Internet for the simultaneous participation of a large number of people. Conceptual bases of creation and functioning MOOC, which are based on two key principles of the theory of learning organization – Cognitive behaviorism and Connectivism have been characterized. It has been found out that most of the discussions developed around the main implementation problems of MOOC are: the presence of two different types of MOOC; the role of the teacher in MOOC; participation of students in MOOC; understanding and use of "mass" in MOOC; tracking the border between openness of MOOC and control over their quality. The analysis of the contemporary MOOC platforms shows that the most popular pedagogical-oriented courses are: the development of students' thinking; e-learning and digital culture; schools: history of school education, educational policy; how to become a developer of blended learning technologies as well as development of educational technologies.

Key words: *open educational resources, Massive open online courses (MOOC), MOOC platforms, Connectivism, Cognitive behaviorism, teacher professional development.*

INTRODUCTION

At the beginning of the 21st century the information and communication technology (ICT) has been extremely widened in the administrative, research and training spheres of universities. The UNESCO World Education Conference (2009) on the "new dynamics" of higher education and scientific research confirmed the link between the increasing role of ICT and the proliferation of open education, due to a massive selection of on-line type of training among students (UNESCO, 2009). American educational statistics for 2011 confirms that 91 % of two-year and 60 % of four-year US colleges have already introduced a wide-ranging online learning and more than 80 % of US students have chosen online courses (Chronicle, 2011).

But years ago the British Open University started the practice of learning materials introduction in the open access for encouraging non-formal lifelong learning. Martin Bean, the Chancellor of the Open University, believes that one of the most important functions of a modern university is to provide a way from non-formal to formal education for all. This

could create new examples of ICT-based learning in higher education, as people turn to the global storage of "open educational resources" in order to find materials for their research and then enter the certification. The mentioned above will ensure an interesting interaction between secondary, higher and adult education by creating objective conditions for the forming of stable system of lifelong education, training, retraining and professional development of specialists at the national, regional and global levels (Информационные и коммуникационные технологии в образовании, 2013).

THE AIM OF THE STUDY

The purpose of research consists in revealing theoretical principles and practical aspects of teachers' professional development in terms of open education by means of Massive Open Online Courses (MOOC) on the basis of structural and functional analysis of phenomenon under investigation.

THEORETICAL FRAMEWORK AND RESEARCH METHODS

The MOOC concept is based on key principles of two learning theories, namely:

1) cognitive behaviorism (teaching and learning are seen as a dynamic process in action), which is based on the institutional-oriented method of teaching, which is characterized by short social contact, excessive dependence on the content of the video lectures and automated method of evaluation;

2) connectivism, that embodies the principles of educational innovation within the networking method of training (a variety of learning approaches, the key of which understands the process of forming networks and decision-making) (Bayne, Ross, 2014).

To achieve the aim of the study we have used such methods as analysis, synthesis, systematization of scientific literature, generalization.

RESULTS

Bibliographic analysis of international organizations documents concerning teachers' professional development within open education made it possible to understand the key research category of "open educational resources" as "educational or scientific resources available in the public domain or provided by free license to use and recycling. Open educational resources can include full courses, course materials, individual modules, textbooks, videos, tests, software and any other tools, materials and technology used to provide access to knowledge" (UNESCO, 2012). The leading role in the forming of open educational resources belongs to universities as reliable sources of educational and scientific materials. Leading universities create their own open educational environment or combined with one another, companies and international organizations to develop common open educational environments (e.g., MIT and the Open University of Great Britain, YouTubeEdu, UNESCO OER Community, WikiEducator). The main goal of open educational environments development became a creation in 2008 of Massive Open Online Courses (MOOC) in University of Manitoba.

According to R. Kop, learning within MOOC is enhanced by four major types of activity:

– aggregation, access to and collection of a wide variety of resources to read, watch, or play;

– relation, after reading, watching or listening to some content, the learner might reflect and relate it to what he or she already knows or to earlier experiences;

– creation, after this reflection and sense-making process, learners might create something of their own (i.e., a blog post, an account with a social bookmarking site, a new entry in a Moodle discussion) using any service on the Internet, such as Flickr, Second Life, Yahoo Groups, Facebook, YouTube, iGoogle, NetVibes, etc.;

– sharing, learners might discuss their work with others on the network. This participation in activities is seen to be vital to learning (Kop, 2011).

Due to the benefits of information and communication technologies, the MOOC concept promotes inter-activization of pedagogical techniques and helps to conceptualize and build learning material in definite logic. As the connectivism theory developed with the widespread use of information and communications technology, it suggests the transformation of students' role from simple memorization and understanding to the ability of knowledge finding and application at the time and in the place where it is needed. Furthermore, technological and social networks, according to G. Siemens, capable even to "remove the walls" in classrooms, leveling the traditional role of a teacher, which remains as such in behaviorism and constructivism (Siemens, 2010). In other words, MOOC try to create around each student a personal learning network based on ongoing close collaboration with teachers and students. Hence the success of student learning is provided, first of all, by strong skills to navigate the network, to form clear personal learning goals and to choose the suitable content of education, as the development of students' individuality is central to MOOC.

Though MOOC are at an early stage of development, we understand them as innovative and inexpensive way to spread knowledge on the most massive audience. Herewith, the teacher performs two functions: on the one hand, supporting, that is to establish collaboration between students to create and reconstitution of the learning content, and, on the other hand, constructivist one, to design the interaction of students with existing and new knowledge resources. That is why, unlike traditional pedagogical approaches, teacher does not bear a sole responsibility for the definition, creation or provision of learning content. This, in turn, encourages all participants in the educational process to adapt to new forms and methods of mastering complex "distributed" knowledge by which the contemporary learning environment is characterized.

It is commonly known that MOOC are located on specially designed platforms of leading universities, the most famous of which are: Coursera (Stanford University), EdX (Massachusetts Institute of Technology and Harvard University), Udacity (Stanford University), Khan Acadamy (Harvard University). Currently, the most popular (about 7,326 million students from 190 countries) is Coursera that proposed 638 courses on different fields of study, among which there are 49 for teachers' professional development. Recently Coursera rapidly diversifies its mission, including the list of courses on school, pre-school and teacher education. It also cooperates with various centers of teachers' professional development, museums and art foundations to widen and deepen opportunities for postgraduate studies.

Teachers usually justify four main reasons for MOOC usage during professional development, namely:

– convenience: performance at their own pace from any location with Internet access;

– free of charge: (available some additional pre-paid components), but they are organized and conducted by professors from leading universities;

– continuity: some MOOC designed to continue received education credits (EDX and Coursera offer training courses for teachers and provide certificates that are recognized in many school districts as professional lifelong education);

– development of pedagogical skills due to: 1) teaching style peer analysis, which improve their own style by the best practices adaptation; 2) rethink of technologizing of the

learning process from the position of a pupil; 3) justification of MOOC in teaching students according to educational purposes.

Although MOOC for teachers' professional development focus mainly on methodological issues of teaching and learning, they also significantly deepen the special-subject knowledge.

The analysis of supply on MOOC platforms has given us the opportunity to identify the priority fields suitable for teachers' professional development:

1. The development of students' thinking. The developers note that the recognition of the importance of students' ideas to improve the learning process is one thing, but developing skills to use them for the benefit of the whole class – another.

2. E-learning and digital culture. The course is different from many similar, especially because it helps to understand the nature of digital culture, mechanisms of action and relationship within an online learning (Kleiman, 2013).

3. Schools: history of school education, educational policy. For teachers with an interest in educational reform, this course covers many currently circulating ideas for improving the state of education. Teachers can come away with a greater understanding of the discourse around school reform, with new opinions about what the school system needs, or with more research to back up those you already have.

4. How to become a developer of blended learning technologies. This course shifts away from the more theoretical discussions of education and technology and focuses on the specifics of building a blended learning course. The course provides access to a collection of resources that helps teachers through the process of bringing more online learning experiences into their courses.

5. Development of educational technology. This course examines how educational technologies are developed and how they are used. Participants of this course will gain a clearer understanding of the process of developing education technology and the work that goes into understanding how students and teachers think about and use technology. They will also gain some insights into education technologies they may not be familiar with yet (Hicks, 2015).

6. Self-Directed Teacher Improvement. The course is designed for teachers seeking more feedback on their teaching. Video equipment is required for this course, which features several video-based case studies along with writing assignments.

7. Surviving Your Rookie Year of Teaching. This teaches new educators how to survive the beginning of their teaching careers. The course covers how to create a classroom management plan, as well as the benefits of maintaining a balance between teacher-driven and student-driven classroom activities and how to create positive relationships with parents (Wilson, 2016).

CONCLUSIONS

The study has showed that the priority fields of teachers' professional development mainly relate to the functions they perform in the process of MOOC developing and implementing, namely:

– individualization of each course design;

– development of common educational approaches and technologies, the so-called "MOOC-pedagogy";

– balancing of computer effective intervention into the teachers' functions.

However, the most actual problem is acute assessment, which is the subject of constant experimentation of teachers and educational institutions. In their daily work, they

try to inquire: how to compare learning within MOOC with traditional contexts; how to identify each student within MOOC by the results of their study; possibility of MOOC accreditation by higher education institutions; how to check the profitability of MOOC providers, universities and other organizations; how to avoid plagiarism and cheating while studying at MOOC.

Rather perspective we consider the study of the guidelines for teachers' professional development in European educational space.

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