

MOBILE LEARNING AND MOOCs

PhDc. Eda KAYPAK
Anadolu University
Eskişehir- TURKEY

PhDc. Nil GÖKSEL CANBEK
Anadolu University
Eskişehir- TURKEY

Inst. Harun BOZNA
Anadolu University
Eskişehir- TURKEY

Prof. Dr. Chih- Hsiung TU
Northern Arizona University
USA

Abstract

Massive Open Online Courses (MOOCs) designed upon the idea of free, open and world-wide knowledge sharing, have been an out-spread response to global educational needs of distant learners since 2008. In this connection, MOOCs have a pivotal importance for not only providing educational equality for millions, but being a unique opportunity for supporting students at a distance as well. Also within the ascent of mobile learning in education field in the last decade, MOOCs have got a new dimension; that is learning any time at any place. Keeping these views in mind, the focal aim of this paper is to provide a general overview on the emergence of MOOCs, the different types of MOOCs, the dimensions of these MOOC types, their typologies as well as to provide a specific examination on e/m learning integration in the context of formal, non-formal and informal learning.

Keywords: Massive Open Online Courses (MOOCs), MOOC types, MOOC typologies, mobile learning, MobiMOOCs.

MOOCs AT A GLANCE

A MOOC or Massive Open Online Course is open online course model which delivers learning contents prepared by prominent institutions to every distant learner across the globe with no geographical, social or economic restrictions. The courses have no limits on attendance as well. Massive Open Online Courses (MOOCs), can be named as a mass education, have different types such as cMOOC, xMOOC, Hybrid MOOC, MobiMOOC, and EduMOOC. Loosely borrowing from the original concept of the MOOC (now labelled cMOOCs) developed by Downes and Siemens, three new major MOOC technology platforms (now labelled xMOOCs) launched in 2012, namely edX, Coursera and Udacity (Yuan, Powell & Olivier, 2014). xMOOCs were primarily based on interactive media, such as lectures, videos and text that followed a behaviorist pedagogical approach (Conole, 2013). To Yuan, Powell and Olivier (2014), these courses are all developed by elite universities to publish their courses online, for anyone interested in learning for free. Additionally, these free courses provide a gorgeous opportunity to close the biggest educational gap between the elite and the needy as indicated by Thomas Friedman from The New York Times (Evans & McIntyre 2016). Table 1 given below, shows the two different forms of MOOCs in terms of massive, open, online and course:

Table 1: MOOC Typologies

xMOOCs		cMOOCs
Scalability of provision	Massive	Community and connections
Open access - Restricted license	Open	Open access & licence
Individual learning in single platform	Online	Networked learning across multiple platforms and services
Acquire a curriculum of knowledge & skills	Course	Develop shared practices, knowledge and understanding

Yuan, Powell and Olivier (2014)

Based upon the above mentioned efforts to start crowdsourcing push towards MOOCs, different world institutions have recently focused on MOOC and mobile learning (m-learning) integration.

MOOCs DELIVERED VIA MOBILE LEARNING

The emerging advances in mobile learning (m-learning) have a great effect on distance education all around the world. In many emerging regions of the world, learning societies learn and share information on the move that results with fully mobile human lives. In this regard, it might be observed that m-learning as the immediate descendant of e-learning (Laouris & Eteokleous, 2005) has become "just in time, just enough and just for me" model of flexible learning (Peters, 2009). As aptly described, m-learning with its flexible form facilitates active learning. MOOCs, in this sense may be considered as the strongest learning milieu that allows students to be part of a mobile system. In this connection, there has been a visible tendency towards m-learning within the studies related to MOOCs such as (mobimoooc.wikispaces.com), (<http://facultyecommons.com/category/moocs-innovations/>), (<https://mosomelt.wordpress.com/>) (Pegrum, 2016). As also indicated by Koutropoulos et. al. (2012), MOOCs suggest possibilities for research in many areas, including learner motivation, engagement, social presence and instructor presence. According to the writers mentioned above, initial periods of a MOOC should be analyzed in terms of learners who are lurkers, who are active participants, and the ones who drop out the courses completely.

Various case study research samples on the design and implementation of MobiMOOCs have also been carried out. For example, a six-week MOOC format course starting from 2 April to 14 May 2011 on mobile learning was organized by Ingatia de Waard (de Waard at al. 2011). This conducted MobiMOOC course may be a good reference in order to comprehend the idea of using Open Educational Resources (OER) in terms of participants, discussion threads, tweets hashtags and so on.

MOOCs WORKING WITH MOBILE LEARNING

Mobile learning is fundamentally about increasing learners' capability to physically move their own learning environment with them (Ogata and Yano, 2004) in order to facilitate distance learning on individual and collaborative basis. Today many higher education institutions embrace mobile learning initiatives that provide an opportunity for students to be part of that cross-border higher education. In the last few years, mobile learning has been increasingly used to support learning experiences both in formal and informal contexts (Ahmed & Parsons, 2013; Jones, Scanlon, & Clough, 2013). In addition to those experiences, several attempts on integrating MOOCs and mobile learning have been observed since 2011. As indicated by Chen, Barnett, & Stephens (2013) MOOCs are built on the characteristics of massiveness, openness, and a connectivist philosophy. In this regard, it is probable to say that MobiMOOCs would help mass and open education and be formed within a connectivist

frame. In the year of 2016, a MOOC may be regarded as a non-formal learning opportunity by which learners feel free to complete activities in relation with their own interests rather than formally structured course materials (Littlejohn, Hood, Milligan & Mustain, 2016).

THE SIGNIFICANCE OF MOOCS WITH MOBILE LEARNING

MOOCs have started to become widespread so thanks to emergence of phenomenal network and the theory of Connectivism, proposed by George Siemens as a new learning theory for a digital age (Siemens, 2004). It was then arranged and managed by Stephen Downes and George Siemens by means of University of Manitoba, Canada. In spite of the limited advertisement, 2000 people from all over the world registered for the course. It presented a unique chance to discover how online learners learn in large open networks, which offer connectivity, extensive diversity and sharing information.

MOOCs are innovative way of teaching and learning (Meyer & Zhu, 2013). As a new type of asynchronous online learning, it provides unique benefits for learners and providers, flexibly for higher education institutions, commercial organizations, and faculties. While some critics declare concerns about the high "dropout" rate among students who participate in MOOCs, this may not be the exact frame of reference. MOOCs are principally used for informal learning, which calls for flexibility and highly modularized content so that students can pick and choose what is most pertinent to their needs. In the future, MOOCs will need to offer learners more choices for how to join.

Traditional educational institutions will need to deem what part they want to play in the MOOC space and how they can serve their on-campus learners as well as the broader universe of potential learners. As both traditional and contemporary institution, Anadolu University, currently provides MOOCs that are free of charge. This mega university, whose vision is supporting lifelong learning, has been providing open courses to learners across the world since 2015 under the platform called AKADEMA (<http://akadema.anadolu.edu.tr/>). The platform started providing 7 courses in 2015, 26 courses in 2016 and finally reached 51 courses in 2017. These courses are conducted on a unifying milieu called Anadolium eKampus (<https://ekampus.anadolu.edu.tr/>). The participants are awarded with certificates as long as they complete the programs they enrolled.

A corresponding movement to MOOCs and one, which could act as a promoter to how thriving MOOCs are incorporated, is mobile learning. "Recent, large-scale deployment of mobile devices for learning have initially shown positive results" (Hargis & Cavanaugh, 2014; Hargis, Cavanaugh, Kamali, & Soto, 2013a; Hargis, Cavanaugh, Kamali, & Soto, 2013b). Nevertheless, discussions of MOOCs are still incongruent, disintegrated, and distributed among different outlets. As indicated by Daniel (2012) and Clow (2013) systematic and extensive published research on MOOCs was still unavailable but most recent studies show the opposite. While some studies are of the pros, some others are of the cons. Below you can find the major concerns of MOOCs.

1. Class size

Enrolling a course with thousands of participants has its innate challenges. Firstly, providing social presence to the participants is almost impossible. In addition, access to the lecturers is very limited which means lack of interaction. Students are learning based on videos/documents that are posted for the class.

2. Dropout/ withdrawal

"It is acknowledged that MOOCs have high withdraw/dropout rates" (Koutropoulos & Hogue, 2012). The size of MOOCs is often seen as strength, but it creates difficulties. The students that are generally in the demographic to take MOOCs are often the ones that need face-to-face instruction the most. These same students end up never finalizing a course. For instance, MTX's Circuits and Electronics had 154,763 students enrolled – only 5% completed the course.

3. Quality Concerns

Due to the fact that the MOOC industry is pretty new, quality standards are not well formed professionally in place that all of them have to meet worldwide standards, which can be at both the lesson level and the course level. Many MOOCs rely heavily upon unreliable peer grading and unconstructive feedback. While there are first-rate modules available from MOOCs, most programs do not offer the progression of building block classes that traditional universities offer. Establishing quality control is critical to enhance the characteristic of MOOCs.

4. Non-Accreditation

Another subtle downside of MOOCs is they often lack accreditation. This means students will not receive any academic credit for finalizing a course or program. Universities and colleges generally do not recognize certificates of completion obtained by students.

Although there are various pros and cons of MOOCs, we should bear in mind that they offer remarkable courses without tuition for people all around the world which enable lifelong learning.

TRENDS AND FUTURE OF MOOCS WITH MOBILE LEARNING

To see where the MOOCs with mobile technologies are going, first we should look at where we are now in online world. To Downes (2005), where we are now is where we were prior to e-learning. During online practices, the traditional theories of distance learning such as Moore's transactional distance have been adopted. As a result, the dominant learning technology employed today is the learning management system (LMS) such as Blackboard, Moodle, and Canvas.

For Garrison (2000), on the other hand, in the following phases of the 21st century, which is also called as the post-industrial era of distance education, transactional issues (i.e. teaching and learning) will predominate over structural issues (i.e. geographical distance). In this respect, we will witness the rapidly rise of mobile learning as a domain. Mobile learning not only provides opportunities to create, but also to connect (Downes, 2005). Since nowadays, mobile access has become the main way to access to the Web, mobile MOOC can be considered as a very reasonable way to address a larger audience all around the world. When the MOOCs' informal nature, and the fact that they are not restricted by time and place are considered, it can be seen that their principles closely overlap with the principles of mobile learning (Explore a New Learning Frontier: MOOCs), so from 2011 onwards, mobiMOOCs, opening up the MOOC format for mobile devices, have been newly in use. In this case, MOOC is employed as the pedagogical format and mobile learning as the emerging technology (deWaard et al., 2011). So, MOOCs can be regarded as an educational approach that is supported by current technologies. Considering the implications of MOOCs with Mobile learning on teaching and learning practices (See the next section), in the near future, it seems that MOOCs with mobile learning will be employed more commonly. Thanks to further research on this novel practice, the benefits (i.e. intrinsic motivation), and challenges (i.e. socioeconomic and ethnic breakdowns) of MOOCs with mobile learning will be taken under control and contributing dynamics will be mapped. Furthermore, more online learning communities will be framed on MOOCs with mobile learning, considering the high student retention rate in these particular environments.

All in all, in the near future, MOOCs will be redesigned within the context of mobile learning to maximize self-organizing, self-referencing, and knowledge-producing capabilities of them (deWaard et al., 2011).

IMPLICATIONS OF MOOCS WITH MOBILE LEARNING FOR TEACHING AND LEARNING

In line with the paradigm shift in 21st century distance education from structural issues (i.e. geographical distance) to transactional issues (i.e. teaching and learning) as Garrison (2000) suggested, the emerging phenomena of MOOCs with mobile learning has resulted in a transformative

educational paradigm (deWaard et al., 2011). It means that there have been a lot of implications of MOOCs with mobile learning on transactional issues, that is teaching and learning.

First, in MOOCs with mobile learning (e.g. <https://www.mooc-list.com/>), learners share their experiences with others by means of Web 2.0 tools, assist each other to expand their understandings of the topic, as well as provide and receive feedback from each other. Therefore, it can be said that MOOCs with mobile learning can be used as a way to stimulate collaboration, communication, and interaction among learners in teaching and learning practices (deWaard et al., 2011).

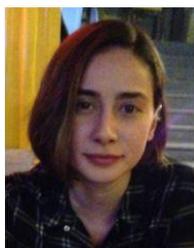
Second, MOOCs with mobile learning employs two important technologies: Mobile technology and social networking technologies (Web 2.0 tools) in teaching and learning practices. There are two benefits of using these particular technologies: a) learners already use these technologies in their daily lives, so they are familiar with their structure, and b) learners can access teaching and learning environments at any place any time convenient for them.

Third, MOOCs with mobile learning enhances dialogue among learners. The more dialogue means, the more dynamic interaction among learners, and a good degree of interaction among learners result in collaboration (Rodriguez, 2013). So, in a broader sense, it can be said that MOOCs with mobile learning is a good way to create online collaborative learning communities, which is the most desired environment in distance education.

In general, MOOCs with mobile learning is an example of an open and adaptive system, so it will play a crucial role in post-industrial era of distance education when the present teaching and learning practices have to be redesigned to respond the specific needs and realities of this new era (deWaard et al., 2011).

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BIODATA AND CONTACT ADDRESSES OF AUTHORS



Eda KAYPAK is an English Language instructor at Anadolu University, Turkey. She has currently been doing her PhD in Distance Education department of Anadolu University. She received her MA degree in Bilkent University, Turkey with her thesis titled as "The Interconnectedness of English as a Lingua Franca (ELF), Study Abroad, and Language Learner Beliefs" in 2012. Her research interests are 21st century skills, rhizomatic learning, digital citizenship, Postmodernism, digital transformation and study abroad.

PhDc. Eda KAYPAK
Anadolu University
School of Foreign Languages
Eskişehir-TURKEY
E. Mail: ekaypak@anadolu.edu.tr



Nil GÖKSEL-CANBEK, who is an English language instructor, is a PhD candidate in the Department of Distance Education of Anadolu University. She pursued her MA Degree with her study entitled "Learner-Instructor Interaction within University-Community Partnerships by Giving Samples from Second Life (SL)" in 2009. Currently, she is working on various academic works related to Personal Learning Environments and their potential use in foreign language learning. Her other research *interests lie* broadly in the areas regarding Educational Social Networks,

New Learning Technologies, Virtual Interaction, Augmented Reality, Web 2.0 tools, Mash-ups and Artificial Intelligence.

PhDc. Nil GÖKSEL-CANBEK
Anadolu University
School of Foreign Languages
Eskişehir-TURKEY
E. Mail: ngoksel@anadolu.edu.tr



Harun BOZNA is an English language instructor in the Department of Foreign Languages, Anadolu University, Turkey. He received his Bachelor's degree from 19 Mayıs University, English Language Teaching Department. Currently, he is an MA student in the Department of Distance Education, Anadolu University. His research interests are instructional design, innovations in e-learning, technology adaptations in education, creative drama and applied linguistics.

Inst. Harun BOZNA
Anadolu University
School of Foreign Languages
Eskişehir-TURKEY
E. Mail: hbozna@anadolu.edu.tr



Chih- Hsiung TU, Ph.D. is a Professor at Northern Arizona University, Flagstaff, AZ, USA. His research interests are distance education, socio-cognitive learning, socio-cultural learning, online learning community, social media, personal learning environments, and network learning environments. He has authored many journal articles, book chapters, edited a book, authored two books etc.

Prof. Dr. Chih- Hsiung TU
Northern Arizona University
USA
E. Mail: Chih-Hsiung.Tu@nau.edu

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