MOOCS DEVELOPMENT – ACTION THRILLER, ROMANTIC COMEDY OR FILM NOIR?

KRZYSZTOF GURBA, PONTIFICAL UNIVERSITY OF JOHN PAUL II, KRAKOW, POLAND

ABSTRACT
From the beginning in 2008 until today one can observe several milestones in the development of Massively Open Online Courses (MOOCs). In yet short history we can observe general trends as well as differences in developing lines for various attitudes, realizations and “philosophies” in designing and applying massive online courses. First boom and enthusiasm was soon replaced by self-reflection. It resulted in more careful and reasonable treatment of this new learning tool. But MOOCs from the very beginning were subject of criticism. In many cases critical voices were taken seriously and in some cases new, upgraded version of massive courses was of much better quality without repeating old errors. In this paper we will present and analyze case by case development of MOOCs until today, taking into account changing methodology, organization and logistic, kind of didactics, users profiles, technology, social context and other dimensions of the learning process in broad sense. Then we will present characteristics of different scenarios of developing history of MOOCs. Threats and opportunities will be taken into account, to point out the important constituents of courses design that will provide the future for developing MOOCs and in a proper way. Among important elements of possible optimistic scenarios for the development of MOOCs (or similar kinds of massive online courses) are: effective tools for collaborative learning, sustainable networking, flexible choice of learning paths, general adaptability of the courses, highest possible quality of the learning content and individualized approach to users. Using the metaphor of the history of MOOCs as a realization of movie scenario, we would say that we are in the middle of second act of the film, waiting for its final resolution. And depending on the construction of future scenario, we will set the dynamics, genre and overall success of this “movie”.

KEYWORDS: Adaptability, collaborative learning, MOOC, quality of learning, social learning, sustainable networking

Preface
The field of distance learning through participation in massive, mostly free and widely available courses is relatively young. The beginning of properly understood MOOCs is considered to be the year 2011, although there are supporters of the thesis that sources of this trend in teaching (better to say - learning) online can be dated much earlier. Even if we agree that the Connectivism and Connectivity Knowledge course in 2008 is already the first MOOC, history of massive open online courses does not exceed ten years. And yet, a lot changes in this short space of time on all possible levels of analysis.

Indeed, several years of the turbulent history of the MOOCs is reminiscent of the “journey through torment”. Or maybe it can be better described as a good movie scenario with variable plot sequences. At first there was a wave of enthusiasm in years 2011-12. Later there were
signs of reluctance and even hostility - as in some of the wordings in the EU report in 2014 about the threats posed by the import of MOOCs from America. For a long time, the reluctance towards MOOCs from large universities in Great Britain continued. There were races of ambitious universities after the largest piece of this cake (and very concrete amount money). There were also those who foretold the quick end of MOOCs as a temporary fashion and whim.

Today we have seven years since the founding of MOOCs in their present understanding, meaning as truly massive, truly open (though not as free as at the beginning) online courses. We have at our disposal a whole new typology of MOOCs, not just the division into xMOOCs and cMOOCs (I invented sMOOCc myself, but I do not want to talk about it in details). After all these storms and battles around the MOOCs, the landscape stabilizes and one can indicate the most important trends in it. In this text I will distinguish seven of them, which I consider to be the most important and the most developmental ones. These are: consolidation, new marketing, adaptability, collaborativeness, new technologies, research object and social phenomenon.

**CURRENT LANDSCAPE**

**CONSOLIDATION**

Instead of platforms for creating courses, aggregators are created (eg OpenUpEd promoted by the European Commission), and course bases created in the cloud. Old players are joining this trend of aggregation, eg MOODLE or Blackboard, or SAP, as well as the biggest ones, for example Google with their Google Coursebuilder. Course creators strengthen relationships with the largest prestigious universities: edX with Harvard and MIT, Coursera first with Stanford, and now with Yale, FutureLearn with the Open University. The courses themselves are also consolidating, because they are more and more often aggregated into cycles, and even into study programs and certified packages. Finally, databases about course offerings, informers and newsletters are published, listing full lists of created and active courses from around the world.

**NEW MARKETING**

Platforms and aggregators have to fight for customers, and to use sophisticated marketing. The novelty is transferred from other branches of services so-called narrative marketing. It is especially important in the period of so-called the “attention crash” era. It is not enough to offer a good brand and quality of content. You need to build a drama strategy around the course and series of courses. Incidentally, the same did the best players in the history of IT industry. Steve Jobs on the promotion of the iPhone said “Today Apple is rediscovering the phone”. When the creators of Google (namely Sergiej Brin and Larry Page) came to Sequoia Capital for money, they started with the following words: “Google lets you find every information with a single key.” MOOCs are promoted on the basis of a story-telling strategy, but also with the use of other, sometimes even risky, marketing tricks. The use of influencers in social networks for this purpose is becoming more and more popular.
ADAPTABILITY
Already in 2013, SOOCs, or Selectively Open Online Course, were announced. Harvard School of Business gave students a chance to modify and freely choose content in the course, adjust content and level to their own knowledge and expectations. Such adaptive courses were already expected. Their presence is still not common enough, but they fit in very well with a different trend of collective and mutual learning. A good example of such a project is CogBooks, a platform for adaptive courses founded by Arizona State University inspired by the Bill and Melinda Gates Foundation. The general trend developed today is characterized by adaptability and openness to free choice of an individual path of learning online with the use of MOOCs.

COLLABORATIVENESS
Collaborative learning, peer-to-peer learning is not any longer new but became everyday practice. In many courses, the standard is the need to peer-assessment performance or work in subgroups. Some call courses using this new collaboration style MOOC 4.0 (Gurba K. et al., 2015). One of the first large and well-studied experiments of this type was the edX course at xMIT University Laboratory in 2015. Out of 28 thousand participants from 190 countries, 350 self-organizing hubs were established, almost 1000 self-organizing 5-person coaching circles. Not only the educational effects were better, but as a result of the experiment the participants obtained many so-called social skills, better understanding of their capabilities and breaking fears and barriers. The creators even postulated talking about new MOOCs as tools for social change. Now some platforms specialize in collaborative MOOC courses, e.g. NovoEd. Collaboration of course participants is facilitated by the exchange of information within social media (Necek R. et al., 2016). New opportunities for an attractive exchange of experience and participation is also provided by applications in new technologies, which will be presented in the next section.

NEW TECHNOLOGIES
After a wave of facilities in using MOOC courses on mobile devices, it's came time for modern forms of media use in learning. The 360° projects and the augmented and virtual reality are introduced to the world of MOOC. The technology of immersing in the virtual world creates new possibilities for the co-presence of participants of online courses in the learning space. Simultaneously with the new technologies, artificial intelligence techniques enter the sphere of distance learning, which at the same time support the individualization of educational paths of learners. Applications that automate communication between organizers and participants using intelligent chatbots and avatars find interesting applications.

RESEARCH OBJECT
Our research (research conducted by the Social Media i-Laboratory for Education team) focuses on such social contexts and factors of the effectiveness of online learning as: identity building, intellectual development, emotional intelligence, spiritual development, level of trust, level of social and digital exclusion. The more interesting results obtained by us show that:
The scenarios of distance learning in a culturally diverse environment must be more adapted to the diversity of recipients, to their context of cultural development (Gurba K. et al. 2015).
The development of adolescents (the main users of online courses) is associated with shaping the style of identity (Gurba E., Gurba K., 2017).
Factors affecting development are also associated with the effectiveness of online learning. Namely, it turned out in our study that these young people, who are shaping their identity by actively seeking independent information about themselves and their surrounding manifest higher level of theoretical knowledge of distance learning, its available forms. They also more often alone held the courses online. The same type of young people are open to new information, looking for various ways and means of obtaining this information using the available opportunities to gain new experiences, education and consequently development (Gurba E. et al., 2016) Very interesting results were obtained in the study on the attitude towards globalization among users of online courses. It turned out that the dominant of critical or fearful attitude toward globalization does not correlate with being familiar with e-learning and having any plans to use it. There is also negative correlation between accepting attitude towards globalization and knowledge of e-learning and plans to use it. This means that the more people in the age of emerging adolescence approve the globalization, the less they know about e-learning and the less they are interested in its use. Conversely, the smaller the interest in the use of e-learning, the more accepting attitude is adopted towards the phenomenon of globalization. It can be cautiously interpreted as indicating that the use of tools for distance learning and even plans for such use enables to better see the drawbacks of globalization and weakens its approval. And conversely, people with low approval of globalization nevertheless prefer to reach after a tools of distance learning (Senejko et al, 2016).

Equally interesting results were obtained when studying the impact of spiritual development on the effectiveness of e-learning (Gurba K. et al., 2016). The factor of spiritual development and seeking a deeper meaning in life is correlated with the greater efficiency of using distance learning tools.

Research on the role of trust in online learning is not new. However, in a specific study carried out by us, we have achieved interesting conclusions in this regard as well (Gurba K., Gurba E. et al., 2017). Credibility of traditional learning is not significantly higher than that of e-learning. More convincing difference appears when subjects were asked about credibility of traditional teachers comparing with virtual ones. In this case significantly more students (63.2%) admitted that online teacher is less credible or is not credible at all. At the same time trust component of e-learning process is appreciated strongly by potential e-learners, because 81.6% claim that trust to online teachers is important and 65.8% say the same according to the peers in the course.

A complete novelty in our team’s research is confronting the standards of good journalism and more broadly speaking effective communication with the effectiveness of online learning. The concept of news values as a set of quality standards in media communication is surprisingly well suited to describe quality determinants in the e-learning process, especially in social and collaborative learning (Gurba K. et al., 2018).

Even more interesting perspective of the study reveals the use of behavioral methods. Our team investigates the reactions of participants of the courses with the use of an eyetracker and the use of biofeedback is also planned. These new research tools enable objective identification of criteria for the applicability and effectiveness of online learning. Experiments, observations of physiological reactions and advanced real-time controlled trials make it possible to draw reliable conclusions and unreachable with other methods recognition of causal relations.

SOCIAL PHENOMENON
We know more about the effects of learning through MOOCs. Efficacy tests and experiments are carried out, as well as the longitudinal studies. What’s more, not only the direct effects of education is controlled, but also the social effect. For example, HarvardX released the *Unlocking the immunity to change* course. Not only 6,500 participants remained after the year involved in the community of the course, but a large group of their friends, friends and colleagues (over 4,000) was also examined, who in 72% estimate that the course graduates have changed.

The scope of research on e-learning, its methodology and determinants of quality and effectiveness in recent years is so extensive that meta-analyses and cross-sectional studies summarizing the state of knowledge about MOOCs appear. In them, dozens of detailed studies on individual aspects of distance learning are summarized (Zawacki-Richter, Anderson, 2014; Bozkurt et al., 2017; Zawacki-Richter et al., 2018). For example, the Global MOOC Survey was organized lately in 2017 by the European Alliance MOOQ led by the Open University of the Netherlands. The survey was supported by United Nations Educational Scientific and Cultural Organization (UNESCO) Institute for Information Technologies in Education (IITE), International Labour Organization (ILO) International Training Center (ITC) and the Food and Agriculture Organization (FAO) with the help of many international institutions, like the International Council for Distance and Open Education (ICDE), Open Education Consortium (OEC), International Community for Open Research and Education (ICORE), Commonwealth of Learning (COL), European Association of Distance Teaching Universities (EADTU), European Distance and E-Learning Network (EDEN), European Association of Technology-Enhanced Learning (EATEL), Contact North (CN).

**Conclusions**

Why was the metaphor of the film used in the title of my paper? Sticking to this metaphor, we can say that we are now in the most interesting place of the script, in the middle of the second act, awaiting the appearance of culminating moments and the final solution of the plot. The new trends in MOOCs are certainly hopeful: effective collaborative learning, effectively supported networking or transverse cooperation at all, flexible selection of individual learning paths, full adaptability and responsiveness of courses, self-regulating quality of the learning content.

The film about MOOCs is still going on and it still has an engaging plot. For some, the more skeptical, it will be a boring and lengthy comedie noire or slapstick comedy of errors, for enthusiasts watched with flushed face thriller or a romantic comedy with happy ending. Depending on the course of the third act, the one that awaits us in the coming years, we will get to know the genre of this film in which we now participate, its audience rate and final success.


Gurba Krzysztof, Misztal Wojciech, Nęcek Robert (2015), *Collaborative MOOCs or the End of the E-Learning History?*. Proceedings 8th Annual International Conference of Education, Research and Innovation - Facing the Challenges of Education Spain, Seville


Zawacki-Richter Olaf, Anderson Terry (eds., 2014), *Online distance education - towards a research agenda*, Edmonton, Canada: Athabasca University Press
