

ON MOOC

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Abstract: *Living in a world that has brought us to witnessing toddlers choosing applications on tablets on their own, determined us to approach the research of a very modern alternative type of education, i.e. MOOC. The basic aim of the paper, besides offering a general view over this concept, was that of identifying the positives and the negatives of this means of online tutoring, by amassing the latest opinions in this field, but also by imparting from our experience as MOOC followers, as participants in different such courses. The conclusions brought us closer to supporting the idea of introducing MOOC in our higher educational institutions, but the outcomes are yet to be discovered in a further research, as definitely desired by the two authors of the present paper.*

Key words: *massive open online courses, structure, advantages, disadvantages, future.*

1. Introduction

Considered one of the most modern alternative types of education, MOOC, Massive Open Online Courses, represents, at the same time, one of the most challenging endeavours of the educational institutions in point of offer and implementation and “opens” new territories with every year that has passed from its inception.

2. History of MOOC

MOOC started to be implemented on a large scale, as a new concept in education, in 2012, and has developed at a very high speed ever since. Still, its roots are to be traced back to 2007 when David Wiley, of Colorado State University, decided to literally open his course, on Open Education, and who, consequently, enjoyed the participation of 50 people from 8 countries [3], [4].

MOOC was first introduced as a concept in 2008, by D. Cormier, of the University of Prince Edward Island and Senior Research Fellow Bryan Alexander of the National Institute for Technology in Liberal Education, in response to a course called “Connectivism and Connective Knowledge” (CCK08). This was a course initially addressed to a group of 25 enrolees, fee paying students who were supposed to study for credits in Extended Education at the University of Manitoba, as well as for countless online students from the general public who were not expected to pay anything [9]. After using different platforms to engage the students with the topic, Facebook groups, Wiki pages, blogs and forums included, over 2,300 people eventually participated in the course, without paying fees or gaining credit and 170 of them created their own blogs.

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Meant to enact the real classroom experience, the course “Introduction to Artificial Intelligence” was offered for free, online, in 2011, by S. Thrun and P. Norvig of Stanford University. Benefiting from the prestige the two professors had, as a result of their affiliation to Stanford University, the course welcomed the participation of 160,000 students from 190 countries, thus becoming not only an open online course, but a really “massive” one [7].

Among the institution-initiators of the trend, as well as the pioneers who had the courage to implement this new approach to teaching on the educational market from its very inception, mention needs to be made of Stanford University, University of Michigan-Ann Arbor and University of Pennsylvania, all educational institutions from the USA [8]. Following April 2012, the month when the adventure of MOOC was released, the educational territory covered by MOOC has spread significantly, reaching European ground in July 2012, when University of Edinburgh, in the UK, and École Polytechnique Fédérale de Lausanne, in Switzerland, imported the concept. Extracting further data from the MOOC map, displayed by the site which was specially created as a way to visualize the growth of global MOOC adoption by those institutions using one of the major MOOC platform providers, the end of 2012, a year which was acknowledged, in the specialised field, as “the year of MOOC”, configures an interesting map for different parts of the world: a spectacular increase in the number of universities in the USA, i.e. 24, as well as a similar boom in the UK, with no less than seven higher education institutions. Moreover, the Hebrew University of Jerusalem, the Hong Kong University of Science and Technology and University of Melbourne could already be pinned on the MOOC map, as representatives of the concept in remote parts of the world. If at the beginning the

names of the platform providers for MOOC registered three major players: Coursera, FutureLearn and CanvasNet, 2013 brought about other important names of MOOC platform providers, such as: EdX, CourseSites, OpenupEd, and Open2Study.

The data used by the site mentioned were collected from blog posts, press releases, and course offering catalogues from each of the providers above, but stopped providing information about the status of MOOC coverage, in point of both institutions and territories, at the end of October 2013. Symptomatic enough, but equally challenging for the authors of the present paper, by the end of this time span, Romania was non-existing on the MOOC map, even though, as mentioned in a previous paper [5], modern concepts of online education, as well as e-platforms were already in use by that time in Romanian institutions.

2. The Structure of MOOC

Usually, the format under which the offer of MOOC is displayed and shared with the participants comprises lectures (usually video), homework, discussions (forums), announcement boards, as well as some additional items, such as: access to Wiki (collaborative platform), the invitation to answer quizzes and questionnaires, virtual assistance from the professors under the form of office hours, the possibility to access external resources, the availability of surveys, the possibility to be granted statements of accomplishment and/or certifications (which is only rarely the case).

For anybody who has ever enrolled for a massive open online course, which would be the case for the authors of the present paper, one of them being currently taking the *Supporting English Language Learners under New Standards* course with Stanford University, the above structure of the platform on which MOOC is offered can be

accepted as easy, especially if former basic training in working with any type of an e-learning platform can be mentioned. Emails containing instructions for the steps that any candidate needs to follow are sent to them on a regular basis by the supporting teaching team who is in charge with communication, and any necessary details, as well as feedback, results, encouragements and assistance is offered to any/all participant(s) along the way in order for everybody to feel informed, assisted and motivated to continue in their endeavour.

The “voice” of the assisting teaching team is to be “heard” from the very beginning when the welcome message is addressed to the candidates in the following way, here and there annotated by the authors of the paper with their observations regarding certain aspects of the text: “Welcome to our course, Supporting English Language Learners under New Standards. We are so glad that you have decided to join us on this adventure! As of this week, there are over 3,000 participants registered for this course. (this would only prove, on the one hand, how many attendants a course of this type can take, and the degree of interest these classes can raise, but on the other hand would not automatically provide the image over the number of participants who actually manage to finish such a course, *our comment*) That's a lot of people! (this would be their comment, in an honest attempt to share their own surprise, *our comment*) So in an effort to learn more about you all, we would like you to complete this short survey. Most of the questions are short answer or multiple-choice, so completing the entire survey should not take you more than 15 minutes. (the time a candidate needs to spend over familiarising with the lectures and more importantly, with solving the assignments, represents one of the main concerns with them, their insistence being on the fact that none of the activities is time consuming and that a decent amount of time

is to be considered, on average, by any candidate, without generating too much discomfort with the domestic chores and/or with any other professional duties, *our comment*) We hope to use the results of this survey to more strategically differentiate the course content for different groups of enrolled participants and to understand the kinds of experiences and prior knowledge participants are bringing to the table. This information will also help us in the design of future courses. (this will be further commented upon in section 4.3, *our comment*) Thank you. We look forward to working with you in this course experience. The MOOC Teaching Team” [11]. And this would only lead us to analysing both the advantages and disadvantages of such a modern means of education, as viewed from different angles and put into perspective from all three components of the of methodological process: teaching-learning-assessing.

3. Advantages of MOOC

As previously stated, the interesting approach would encompass all three elements that constitute the formula of a complete scheme of formal education: teaching-learning-assessing, to which, the authors of the paper dare to add another lens through which both advantages and disadvantages can unfold, that of the institution organising and offering such courses to virtual students.

3.1. From the point of view of the teacher

Starting from the observation that the authors of the present paper haven't had any experience as tutors in a programme like this, the possible advantages detailed below come from either logical inferences or from the specialised literature, the following paper on MOOC having the intention of interrogating professors actively teaching in

this alternative programme of education in order for us to be able to trace the real profile of such a tutor with all the advantages and disadvantages undertaken as first-hand experience by them. In general terms, anyone interested in teaching in such a programme, as a professional, may think of certain advantages that can derive from it.

First of all, there can be the professional development, as the practical aspect of rendering your courses as video tutorials, organising the material to fit into such a format, using the platform, interacting with so many students, organising the homework, as well as the assignments and their assessment is a unique experience that can help any teacher add to his/her professional portfolio. Secondly, the content of these courses can afterwards be used in classroom teaching as well, as OER (Open Electronic Resources) materials, as they already accompany the core content of the class and were extremely coherently structured to help any distant participant. Thirdly, the whole idea of automating the automatable is forced to automate [1] because of “massive”, a component of MOOC which triggers either assignment auto-verification or peer review of homework after deadline, which, as an approach to the process of assessment is, again, unique in point of experience offered to the tutors.

3.2. From the point of view of the learner

This time, the observations contained in this sub-chapter are not only amassed from some people’s experience as students in MOOC programmes, from the specialised literature or from logical deductions, but also, or more importantly, from the authors’ experience as participants in different MOOCs. Mention needs to be made that, if in what the scientific profile is concerned, the offer regarding the courses openly on display is considerably higher, in what the

humanities profile is concerned, the generosity decreases in a reversed proportion to the attractiveness of the few courses offered, one of them being the course mentioned above in this paper and attended by one of the authors.

As stated on the occasion of the Open Education Week, organised in 2012: “Open education seeks to create a world in which the desire to learn is fully met by the opportunity to do so, where everyone, everywhere is able to access affordable...” [10] This simply means that easy and, in the majority of cases, free access to an academic world is opened for any candidate, at his/her own pace, enabling them to get into contact with people all over the world interested in the same domain as them. And even though, sometimes, payment is required, especially when the course one signed up for ends with a certification above the standard statement issued for participation, “...educationally and culturally appropriate opportunities to gain whatever knowledge or training they desire” [10] are waiting for anyone at a keyboard’s touch. In other words, access is boosted, and access is granted to an academic profile and to academic conversations which, for some participants in today’s MOOCs was unthinkable as yesterday’s students.

Considered, as we stated before, a very modern way of teaching, MOOC also offers to the participants a diversity of approaches, as the teachers involved in delivering the video tutorials, as well as the way in which the assessment is carried out, varies a lot, from approach to implementation, from the initial stage to the end of the course. And it is not only that time zones become irrelevant, but also that participants are exposed to a wide range of thinking, professional behaviour and shared background in the profile of their interest that they can feel as if they were accessing worldwide grey matter instantly.

3.4. From the point of view of the organising institution

Regarding this approach, clarifications need to be put forward, as our university does not belong to the group of educational institutions that offer massive open online courses to the public, which means that an internal point of view is excluded, the only one available being the one belonging to different participants in the programmes, who happen to have opinions related to this aspect of the story.

Just like with the teachers' point of view, our intention is to expand upon our research and get the opportunity, as well as the chance, to talk to representatives of institutions that have offered MOOC in recent years as this could also give us an insight regarding their benefits as providers.

Moreover, until this moment there haven't been clear and official statements regarding the advantages universities can derive from offering massive open online courses to the public, but an explanation which has a lot to do with the idea of Public Relations has been considered by many, especially by the Tech Meetup group in Brasov, whose members, on the occasion of their meeting on this topic, on the 26th of June 2014, in which one of the authors of this paper participated, analysed it in detail. The engineers taking part in the event, discussed the entire evolution of MOOC, as a phenomenon, and focused their commentaries on the particular aspect of understanding higher education institutions' benefits as a result of offering MOOC [7]. And it was not only theirs the opinion that the educational settlements' PR is involved in this massive attempt to spread the academia into the world, but also Brian Alexander's who talked about the concept of a "transnational classroom" and a "trans institutional course" [2] in terms of "Why offer MOOC?", his arguments being related to the obvious "academic content unleashed

on to the world" [1]: international reach, curriculum expansion, online teaching and learning exploration, outreach of both public scholarship and new students, information prices dropdown, faculty creativity increase [1], [2].

4. Disadvantages of MOOC

4.1. From the point of view of the teacher

In what this sub-section is concerned, again, we can only imagine what the disadvantages of being a tutor in MOOC would look like, out of the considerations mentioned at the beginning of 3.1 above.

Thus, from our point of view and also according to Iulian Serbanoiu [7], a lot of effort is involved for preparing high quality videos, as well as a huge effort in managing the MOOC, with its entire structure, from the point of view of what a platform for distant learning entangles to the peculiarities of MOOC as such.

Moreover, ensuring support for issues is time consuming and for a teacher accustomed to the traditional way of delivering the message, as well as to the classical way of assigning marks with the assessment process, many limitations can occur with the MOOC platform. Aspects of e-learning platforms and especially their limitations were tackled by the authors of this paper in a previous study of ours [5] and that is why we will not enlarge upon them here.

4.2. From the point of view of the learner

Even though in the description of the courses, when the advertisement of their idea is concerned, they are presented as very little time consuming, still a lot of time is required (maybe even 6-10h / week for one course) for watching the videos, for processing the information and for working on the assignments. Moving to something

mentioned in 4.1, platform limitations prevent the occurrence of a high degree of satisfaction, as, for example, automated test platforms don't always work well, and there is less direct interaction with the tutor, even though virtual office hours/forums may help.

There is also the aspect of a high "dropout" rate, because the negative consequences of deciding not to fulfil the course to the end are non-existent. Periodic announcements are sent to the candidate, but the decision of "skipping" the class altogether lacks any devastating consequences over the participant's status.

Thus, not being yet on par with university courses, MOOCs can prove their efficiency to the maximum they can offer only to those who are very well motivated, extremely interested and very well organised. Unfortunately for a MOOCs profile, most people still think with pen and paper and in order for them to be catered for as well, new teaching methods are probably needed. Another aspect which could be listed to the negatives about MOOC is that they are not suitable for all type of courses, examples such as music, arts or any other subject belonging to the humanities profile are very poorly represented for anybody who would like to check the offers of such courses at this moment.

4.3. From the point of view of the organising institution

According to many participants in this type of alternative education, what a MOOC can offer is still perceived nowadays as a lower quality learning experience than the content of any of the courses from a full-time education programme. They are, subsequently, not even granted full credit by the organising institutions themselves, as, at the end of the course, for all those who have succeeded in completing it, only a statement is issued to

attest their "graduation" and not anything else, unless the course indicated otherwise, from the beginning, and a small fee was collected from the participants (but these would be only rare cases, as they would contradict the whole idea of MOOC, as a concept).

Another worrying aspect, from the point of view of a university offering MOOC, could be related to, according to Bryan Alexander [1], increased adjunctification, a new term in the educational field, borrowed from the economic field, referring to the first step of privatisation, and having generated a whole dispute abroad in relation to the teaching process.

Thus, a direct consequence, and still as a negative aspect, faculties' resistance must be taken into account and dealt with because the concept of MOOC frustrates a lot when referred to from the inside of a university, more specifically, by the teaching staff.

And just when we were about to round up the overview of negatives on MOOC, it was brought to our attention an extremely recent article, published in *The New York Times*, on November 2, 2014 [6], indicating the extent to which MOOCs have become a real issue in the USA and dwelling on the metaphor of "demystifying the concept of MOOC".

The first issue tackled by the author of the article, J.J. Selingo, refers to the aspect of the students' profile which generates that high percentage of dropouts mentioned above, in 4.2, and which is related to the aspect of the prerequisites, also tackled by Serbanoiu [7]: because practically anybody can enrol to a course, with or without any prior knowledge into the subject-area of the course offered, those who manage to finish it will be still "young white American men with a bachelor's degree and a full-time job" instead of a "a villager in Turkey to a college dropout in the United States" [6], meaning those for whom these MOOCs

were initially planned to address to in the first place. As an observation to the above argumentation, what one of us observed, as a change in the way enrolment with a MOOC course used to be and is now, the fact that for a course one year ago there were no questionnaires to be answered before participation to any class was acknowledged, while this year one of us had to fill in answers (see section 2) related not only to her personal and professional background, but also to certain task environment oriented drills, dealing with the scientific content of the course at stake. Could this represent a type of pre-selection which would probably lead to the settlement of this issue: who can participate and in what courses?

A second problem considered was the one referring to the quality of the teaching process, starting from percentages which demonstrated that the same courses under the form of MOOC resulted in very bad marks, while their counterpart as traditional classes offered by universities internally had good results at the end of the assessment process. Furthermore, the teachers invited to take part in MOOCs were either extremely good traditional teachers who didn't have electronic skills at all and found it very difficult to master such an educational programme, or, as it was the case later, high school teachers who didn't have any university teaching experience, but who happen to join MOOCs as it would look good on their CVs.

Thus, with the three main actors as platform providers on MOOC - the sole beneficiaries from a financial point of view of this idea - and with funders of such platforms (see the example of Sebastian Thrun, co-founder of Udacity) leaving the territory and concentrating more on corporate and vocational training, and to charging a fee for their courses, in other words, transforming it into a private corporate business, the article is very

sceptical regarding the entire concept of MOOC, also referred to a “just-in-time education” or “the shadow learning economy” (tracing the words of George Siemens, who co-taught the first MOOC, in Canada in 2008). Selingo, the author of the article, is afraid that “the courses have become an important supplement to classroom learning and a tool for professional development”, in the same way “textbooks supplement courses” [6].

The pessimistic view refers to all those “many educators” who “take the view that, using the metrics by which we judge traditional higher education (prestige, completion rates), MOOCs have failed to fulfil their original promise”, but luckily enough the frame applied is a correct one and what saves this critical approach is the “plateau of productivity” which MOOCs can address in the future.

5. Instead of conclusions: Future of MOOC?

All this considered, is there still a future for MOOC and should Romanian universities consider introducing such courses? The answer depends on many factors, two of them being: MOOCs' dynamics and flexibility in understanding their exact aim and target students and the educational institutions' open spirit in order to be able to adapt and adjust their educational offer to the needs of a population who is less mobile, less interested in diplomas and more interested in the pragmatic aspects of their education, catering for practical needs. In his article, Selingo offers such an example, which is worth quoting by us, as it suits the purpose of our opinion: “Take Leo Cochrane, who already has a bachelor's degree but took a free online class from the University of Virginia's Darden School of Business to help expand his start-up air-purifying business. The course was perfect for the

time-pressed entrepreneur. He had little inclination or money to follow a path that would take him to a traditional campus or even to an old-fashioned online course, with its rigid deadlines for lectures and completing assignments. With a MOOC, he could watch video lectures on his iPhone while running on a treadmill and pick and choose what he needed to learn from the syllabus.” [6]

According to Alexander “Education as a Service”, or EaaS by its acronym, [1] is a concept which should be naturalised by universities nowadays. He estimates that “in 50 years [...] there will be only 10 institutions in the world delivering higher education and Udacity (one of the three major MOOC providers, next to edX and Coursera – *our comment*) has a shot at being one of them” [6]. This type of education has more to do with a vocational approach than with a common core curriculum, classically designed. Demographics, the Great Recession, hollowing out of the middle class, globalization, automation, the world going online, complexity of higher education, adjunctification, mobile applications, social media’s triumph, interface transformations, and global cyberwar and surveillance, as well as the need of global conversations which increases day by day, the desire to have more access to more information, and lots of latent creativity waiting to be used are only a few of the reasons mentioned by Alexander which are worth taking into account to render a high degree of trust to the idea of MOOC for the future. The higher education landscape should, in other words, change its complexion: from a life changing experience to supplementing it, from pedagogical to logistical, from pen and pencil to technical, online, open and massive.

Other information may be obtained from the address: andreeabrat@unitbv.ro.

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