

Digital communication in humanities and social sciences approaches: MOOC in the Moroccan University as a case of study.

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ABSTRACT: There is no doubt that MOOCs constitute a massive phenomenon that has become depressing due to the skepticism of the traditional stream of distance learning and the reluctance of teachers, practitioners and university pedagogues [1]. But can we say that the concrete object MOOC is a scientific object in the sense of [2], or is it still only an empirical construct covering such diverse realities that they cannot be treated as only research object? Bearing this in mind, our article sets out to draw up a state of the art of the MOOC horizon and to present a diagnosis of what exists in Moroccan universities based on an empirical frame work and eclectic methodology.

KEYWORDS: MOOC, Scientific object, state of art of MOOC.

I. INTRODUCTION

Massive and open online courses (MOOCs) have generated a lot of interest for educational institutions. MOOCs are a new revolution in technology-enabled learning (TEL), providing new opportunities for many learners to take free online courses around the world. [3] In recent years, the phenomenon of MOOCs has become widely recognized as a crucial means for free courses offered by Institutes for Informal and Formal Education [4]. MOOCs have radically changed the way we learn and the way we teach. The main objective of MOOCs is to provide new opportunities for a large number of learners to attend free online courses. Its MOOCs have unique characteristics that produce an effective model of technology-assisted learning (TEL) in higher education [5]. The number of academic publications around MOOCs has increased rapidly in recent years [6, 7]. Topics around MOOCs are widely discussed through a series of academic publications of different theoretical and practical perspectives, including many MOOC design implementations and concepts [6, 7]. These publications are, however, still in an embryonic stage and a systematic classification of the MOOC literature is still missing. This document is one of the efforts to develop, in a preliminary phase, a state of the art on MOOCs to build a deeper and better understanding of the key concepts in this field. Next, to identify opportunities for future research in the field of MOOCs that should be taken into account in their development through a field survey. In this article, we discuss the different principles of MOOCs. Apart from the introduction, the making of this stream is structured according to the following sections: the first section presents the scope of our research. The second section describes the research methodology and how we collected the research data. In the third section, we review and discuss the results of our MOOC questionnaire. Finally, the fourth section summarizes the main conclusions to be drawn from this research and highlights new opportunities for future work.

II. MOOC as a concept

The term MOOC refers to the media impact of the phenomenon [8, 9], precisely on social networks [10, 11], multiple actors have appropriated the term and the constant evolution of devices have not failed to throw a some vague about the definition of the object. As of 2012, MOOCs have been a notable success which has spawned a number of more-than-intentional diversions [5]. It has been designated for all kinds of training and including fully paid e-learning devices. The transcendentalism of the concept is the result of the fact that the term was popularized by university courses by American universities with first experiments that were called MOOC. It goes without saying that the term MOOC was proposed in 2010 by Canadian Dave Cormier, as pronounced by [12]. It refers to a handful of courses open to all and proposed by some techno-pedagogues from 2008. In line with the connectivism and connective knowledge course, MOOC refers to a series of courses whose courses were first organized in 2008 by Georges Siemens and Athabasca University and Stephen Downes of the University of Athabasca, National Research Council. He gathered about twenty students from the University of Manitoba and more than two thousand Internet users enrolled; the former received teaching credits while the latter were not eligible. Designers claimed connectivism [13, 14], a theory of learning based on the specificities

of Web 2.0 [15]. Proponents of this theory stress the importance of online resources and other Internet users in the learning process. In hindsight, we will talk about connectivist MOOCs, or cMOOCs, to designate the courses that call themselves connectivism. It was only in 2012, when prestigious American universities like Stanford, Harvard or MIT seized the concept, that the MOOCs began to make themselves known to the general public (Papanno, 2012). In the fall of 2011 at Stanford, the teams of Sebastian Thrun and Daphne Koller experimentally and independently launched their first artificial intelligence and machine learning courses open to all [16, 12]. Faced with the success of these experiments, the startups Coursera and Udacity are founded while the edX consortium is constituted, the institutions seize the phenomenon and the movement becomes global. In the space of a few months, institutions from all over the world sign up with the main hosting companies, which are then edX or Coursera. Research on MOOCs is still an emerging field, focusing on a systematic study of published literature on MOOCs by Liyanagunawardena [17]. The study presents a quantitative analysis of 45 peer-reviewed studies and provides a general discussion based on an eight-dimensional categorization, namely introduction, concept, case studies, educational theory, technology, participant-centered, focus-oriented suppliers and others. Compared to the Liyanagunawardena study [17], we created a questionnaire on MOOCs for a quantitative and qualitative analysis of the needs of Moroccan learners. The study also provides a critical discussion and suggests new opportunities for designing a future MOOC.

III. Importance of the study

The study aims to provide parents, teachers and policy makers with information to reflect on various factors that help MOOCs to be an effective tool for facilitating the learning of millions of learners. This research can explore the possibility of introducing these factors into their institutions, which can lead to improved learning outcomes for learners. This study will also be important because the results will stimulate awareness of the importance of MOOCs and strategies that would reduce the negative effects of MOOCs on the learning environment. The results of this study will also be useful for understanding the opportunities and threats associated with MOOCs. In addition, it will also serve as a point of reference for other researchers interested in this area of research.

IV. Conception of the research

In this research, a quantitative methodology was used to collect and analyze data obtained from all learners. A total of 300 were randomly selected as a sample of the study. The sample responded to the statements given and chose their answers based on their perceptions.

The survey was administered online to learners and teachers. The different sections of the questionnaire included: (a) variables, (b) experience of the MOOC for teaching, (c) access to the MOOC for teaching, (d) the possibilities of using MOOCs for teachers; (e) threats of MOOC use and learning; and (f) Learners' views on the use of MOOCs. The questionnaire consists of multiple choice questions and open questions. The choice of the online questionnaire as a tool for collecting information was dictated by the advantages of this instrument. Indeed, it allowed us to reach a larger population while ensuring the anonymity of our respondents.

V. Datacollection procedures

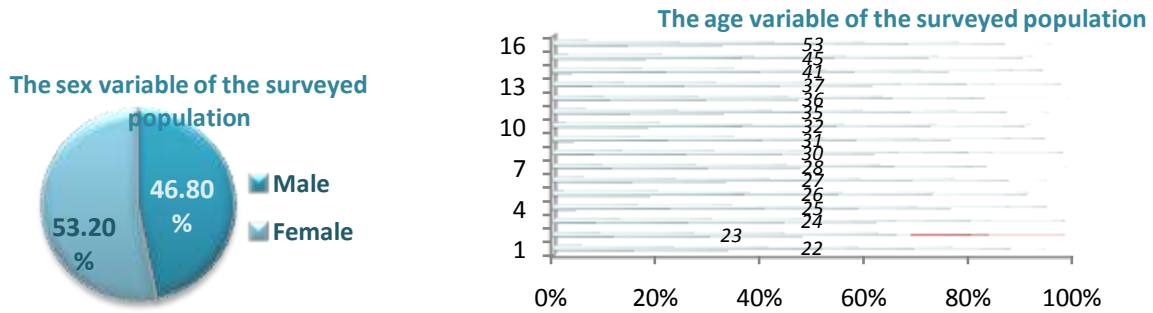
Data collection defines the procedure for collecting data by researchers.

All higher education institutions in Morocco were included in the study. The questionnaire was also distributed to 450 learners identified for this study. The survey took 4 weeks to complete the questionnaire and return it to the researchers. All participants volunteered for research. Some questionnaires contained missing information that details could not be used as a contribution to this research. Finally, 300 questionnaires were used by the researchers for data analysis, including 150 learners and 150 tutors.

VI. Data analysis process

The data collected from the respondents were collected for analysis using the statistical tool (SPSS). The analysis includes an inferential analysis. Researchers used descriptive analysis to analyze mean and standard deviation. Inferential statistics (t-test) were also used to analyze the search results.

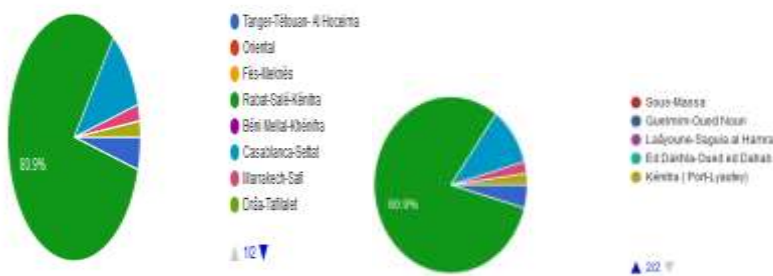
VII. Results of the data analysis



Graph1: The variable of Graph2: the age variable of the surveyed population. Sex of the surveyed population

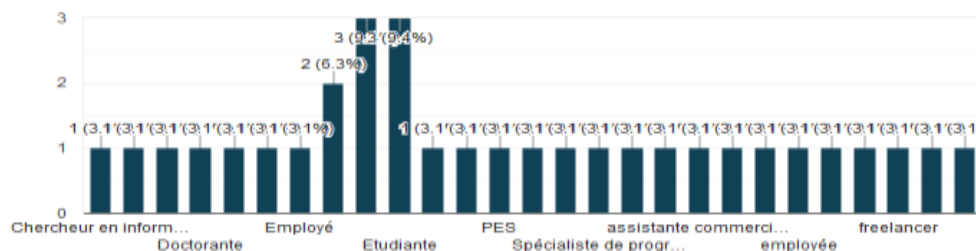
The graph 1 shows that the sex variable represents 53.2% of the male and 46.8% of the female sex. Graph 2 illustrates that the age of respondents ranges from 22 to 53 years old. The dominant age group is between 22 to 35 years old.

City



Graph 3 shows that most respondents come from the city of Rabat with an average of 80.9%.

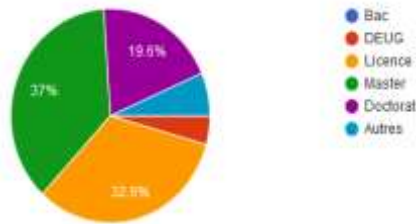
Socio-professional status



Graph4: the socio-professional status of the surveyed population

Graph 4 shows that the student category is dominant with a percentage of 9.4% compared to freelancers or other socio-professional categories.

Level of study



Graph5: Education level of the surveyed population

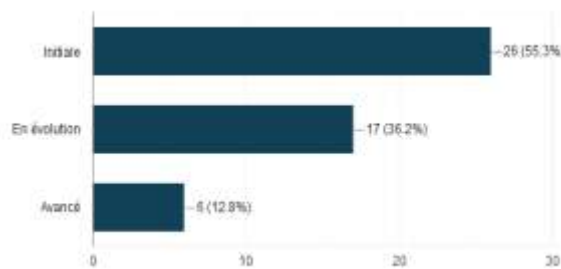


Graph6: What is MOOC for you?

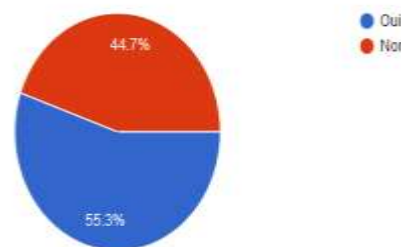
Graph 5 shows that the majority of the respondents are masters students with a percentage of 37%, followed by undergraduate students with 32.6% and doctoral students ranked third with a percentage of 19.6%.

Graph 6 refers to the question we administered to the respondents: "What does the MOOC mean to you?". « The majority response of 85% shows that MOOC is perceived as online courses.

What is your knowledge of MOOC? Do you attend or make classes, trainings and labs on the MOOC?



Graph7: knowledge of MOOC

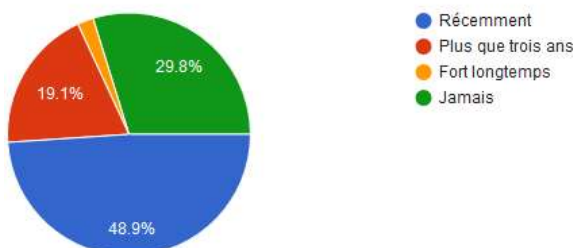


Graph8: Follow-up courses, training and TP on the MOOC

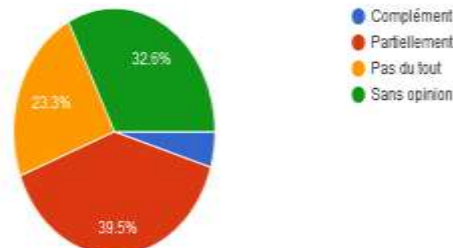
Graph 7 attests that the initial level preaches on the other levels of knowledge of MOOC. This can be interpreted by the fact that MOOC is expanding and constantly evolving.

Graph 8 shows that 55.3% attend courses and training on the MOOC. This illustrates the fact that the MOOC is a field in full emergence and knows an undeniable development.

When did you start following the MOOC? Have your MOOC objectives been achieved?



Graph9: The date of starting to follow the MOOC

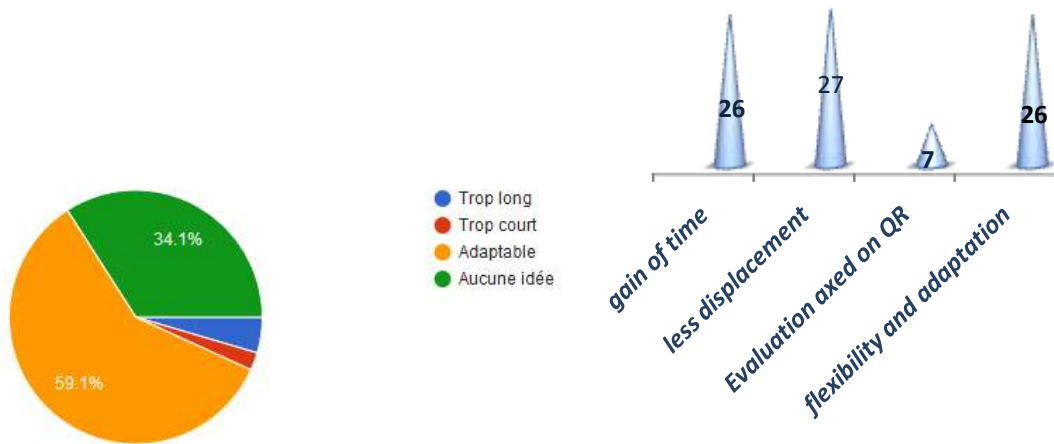


Graph10: The achievement of MOOC objectives

Graph 9 illustrates that most of the respondents started recently to follow the MOOC with a rate of 48.9% against 29.8% who never followed it.

Graph 10 shows that the assigned MOOC targets are partially achieved in an average population of 39.5%.

How do you rate the workflow on MOOC? What do you think are the strengths of the MOOC?



Graph 11: Evaluation of the pace of work on MOOC Graph 12: The strengths of MOOC.

Graph 11 reveals that 59.1% of the surveyed population find that the MOOC workflow is adaptable. Graph 12 shows the strengths of MOOC expressed by the surveyed population. 27 people believe that MOOC reduces travel and saves time and even flexibility and adaptation.

What are the points to propose for the improvement of the MOOC?

A more powerful internet speed. Non-paying certificates on MOOC	Just make it real
Ability to attend classes without internet.	No idea
No idea	Add certificates verified by state
Avoid TPs to download	More details, and more TDs to learn better
Free courses.	Add projects for evaluation and not be content with
Recognition of MOOC certificates and diplomas by recruiters.	automated exercises alone

Graph 13: Proposal for the Improvement of MOOC.

Graph 13 shows the proposals made by the respondents for the improvement of the MOOC. Most of the proposals relate to the internet speed that the target suggests is to be more powerful and also advocates free courses and the recognition of MOOC certificates and diplomas by recruiters.

VIII. Conclusion

Massive open online courses (MOOCs) are one of the most important trends in higher education in recent years. It represents free, global, free access to video-based educational content, problem sets and forums published through an online platform for a large number of participants to attend a course or to be educated. With the flexibility of time and space, MOOCs bring together researchers and learners from around the world. In the main goal is to open higher education by offering free, flexible, fast, free or low cost courses for learners who wish to learn. MOOCs bring new opportunities for innovation in higher education that will enable academic institutions and academics to explore new models of e-learning and innovative practices in teaching and learning. MOOCs are becoming the latest trend in distance education, indicating a significant need for research studies to reduce the threat associated with them.

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